Cardinal®

Cardinal Scale Manufacturing Co.

PRODUCT CATALOG

Bulletin No. 282B

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Cardinal®

Cardinal Scale Manufacturing Co.

ISO 9001:2000

CORPORATE HEADQUARTER CONTACTS:

Address: 203 East Daugherty Street, Webb City, MO 64870 USA
Fax: (417) 673-5001 **Web Site:** www.CardinalScale.com
Hours: 8 am - 5 pm CST Mon. - Fri.

Customer Service	cardinal@cardet.com	(800) 441-4237
International Sales	international@cardet.com	(417) 673-4631
Technical Support	service@cardet.com	(866) 254-8261
Parts Department	parts@cardet.com	(800) 641-2045
Quality Assurance	qa@cardet.com	(417) 673-4631

BRANCH CONTACTS:

1500 Farmer Road
Suite F-3
Conyers, GA 30207
Phone: (770) 483-7574
Fax: (770) 483-2838
E-mail: atlanta@cardet.com

1800 West Colfax
Denver, CO 80204
Phone: (303) 629-6617
Fax: (303) 893-2930
E-mail: denver@cardet.com

3215 NW 10th Terrace
Suite 203
Oakland Park, FL 33309
Phone: (954) 563-4120
Fax: (954) 563-9920
E-mail: miami@cardet.com

WAREHOUSE CONTACTS:

European Warehouse
Unit 17/18 Mercers Road
Chapel Pond Hill
Bury St. Edmunds, Suffolk, IP32 7HX
Phone: 44-1284-703117
Fax: 44-1284-703559
E-mail: sales@cardinalscale.co.uk

Canadian Warehouse
1815 Ironstone Manor
Unit 14A
Pickering, Ontario L1W 3W9
Phone: (905) 839-6239
Fax: (905) 839-6522
E-mail: canada@cardet.com

NIST LEGAL FOR TRADE — These scales are manufactured in compliance with recommendations set forth in Handbook 44, issued by the National Institute of Standards and Technology and have been issued a Certificate of Conformance under the National Type Evaluation Program.

MEASUREMENT CANADA — Has been evaluated and found to conform with the appropriate requirements and issued a Notice of Approval by Measurement Canada, an agency of Industry Canada.

CE — Has been tested and found to conform with the applicable safety directives of the European Union.

REQUIRES ASSEMBLY — This equipment requires some assembly and setup that is not included in purchase price. Contact your local Cardinal/Detecto scale technician for this service.

NSF Certified — These products meet or exceed the applicable National Sanitation Foundation requirements for equipment used in processing food.

OIML — These products have been evaluated and found to conform with the appropriate legal metrology recommendations for the European Union and has been issued an OIML certificate of conformity by the responsible member state. Scales identified with this mark are legal for trade within the European Union and in other countries accepting this approval.

200 SERIES WEIGHT INDICATORS

200 SERIES WEIGHT INDICATORS

Cardinal Scale Manufacturing Co.

MODEL NUMBER	200	204	205	210	215	220
ENCLOSURE	Aluminum	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
MOUNTING	Panel	Bracket	Bracket	Bracket	Bracket	Bracket
RATING	NEMA 12 / IP55	NEMA 12 / IP55	NEMA 4X / IP66	NEMA 4X / IP66	NEMA 4X / IP66	NEMA 4X / IP66
NUMBER OF LOAD CELLS	8 x 350 ohm	4 x 350 ohm	8 x 350 ohm	8 x 350 ohm	8 x 350 ohm	14 x 350 ohm
DISPLAY	0.6"/14 mm High 6-Digit LED	1"/25 mm High 6-Digit LCD	0.6"/14 mm High 6-Digit LED	0.6"/14 mm High 6-Digit LED	1"/25 mm High 6-Digit LCD	0.8"/20 mm High 12-Digit Backlit LCD
NUMERIC KEYPAD				✔	✔	✔ and Alpha
PUSH BUTTON TARE	✔	✔	✔	✔	✔	✔
KEYBOARD TARE				✔	✔	✔
PRESET TARES						✔ 200
DIMENSIONS	5.67" W x 9.13" D x 2.81" H / 14 cm W x 23 cm D x 71 cm H	8" W x 2.125" D x 6.625" H / 20 cm W x 5 cm D x 17 cm H	9.2" W x 2.75" D x 7.5" H / 23 cm W x 7 cm D x 19 cm H	9.2" W x 2.75" D x 7.5" H / 23 cm W x 7 cm D x 19 cm H	9.2" W x 3.125" D x 7.5" H / 23 cm W x 8 cm D x 19 cm H	10" W x 4" D x 8" H / 25 cm W x 10 cm D x 20 cm H
RS232	✔ (Option)	✔	✔	✔	✔	✔
4-20mA CURRENT LOOP	✔ (Option)		✔ (Option)	✔ (Option)	✔ (Option)	✔ (Option)
PRESET WEIGHT COMPARATOR				✔ 3	✔ 3	✔ 8
POWER	90 to 260 VAC, 50 or 60 Hz	115 VAC 60 Hz adapter or, 230 VAC 50/60 Hz, or 6 "C" Alkaline or rechargeable NiCad batteries	90 to 260 VAC, 50 or 60 Hz	90 to 260 VAC, 50 or 60 Hz	90 to 264 VAC, 50 or 60 Hz, or 10 "AA" rechargeable NiMH batteries	90 to 260 VAC, 50 or 60 Hz
PARTS COUNTING				✔	✔	✔
DISPLAYED INCREMENTS	Up to 10,000 Trade	Up to 5,000 Trade	Up to 10,000 Trade	Up to 10,000 Trade	Up to 10,000 Trade	Up to 10,000 Trade
TIME & DATE				✔	✔	✔
PRINTER OUTPUT	✔	✔	✔	✔	✔	✔
CHECKWEIGHING				✔	✔	✔
DIGITAL FILL CONTROL						✔
BATCHING						✔
NTEP CERTIFIED	01-011A2	02-16A1	01-011A2	01-011A2	01-011A2	01-011A2
OIML CERTIFIED	R76/1992-DK1-01.02	R76/1992-DK1-02.03	R76/1992-DK1-01.02	R76/1992-DK1-01.02	PENDING	R76/1992-DK1-01.02

700 SERIES PROGRAMMABLE CONTROLLERS

Cardinal
Cardinal Scale Manufacturing Co.

MODEL NUMBER	777	788
ENCLOSURE	Epoxy painted mild steel	Epoxy painted mild steel
MOUNTING	Desk/Wall/Panel	Desk/Wall/Panel
RATING	NEMA 12 / IP55 (NEMA 4X / IP66 optional)	NEMA 12 / IP55 (NEMA 4X / IP66 optional)
NUMBER OF LOAD CELLS	14 x 350 ohm	14 x 350 ohm
DISPLAY	4-line, 80-character, dot matrix, backlit LCD	320 x 240 pixel backlit LCD
CHARACTER HEIGHT	0.375" / 10 mm	Selectable character sizes from 0.25" to 1.2" (6 mm to 30 mm)
KEYBOARD	43 key alphanumeric keyboard • PS2 keyboard interface • 4 programmable soft keys	43 key alphanumeric keyboard • PS2 keyboard interface • 14 programmable soft keys
INTERNAL RESOLUTION	400,000 divisions	400,000 divisions
DIVISION VALUE	1 to 9 x 10, 20, 1, 0.1, 0.01, 0.001, 0.0001	1 to 9 x 10, 20, 1, 0.1, 0.01, 0.001, 0.0001
RS232 & 20mA CURRENT LOOP	✔	✔
RS422/485	✔	✔
ANALOG OUTPUT (0 TO 10v OR 4 TO 20mA)	✔ (Option)	✔ (Option)
TRIP OUTPUTS	✔ (Option)	✔ (Option)
POWER	90 to 260 VAC 50/60 Hz	90 to 260 VAC 50/60 Hz
SAMPLE RATE	1 to 60 samples per second, selectable	1 to 60 samples per second, selectable
DISPLAYED INCREMENTS	Up to 10,000 Trade	Up to 10,000 Trade
TIME & DATE	✔	✔
PRINTER OUTPUT	✔	✔
CHECKWEIGHING	✔	✔
DIGITAL FILL CONTROL	✔	✔
BATCHING	✔	✔
NTEP CERTIFIED	97-077	97-077
OIML CERTIFIED	R76/1992-DK1-01.04	R76/1992-DK1-01.04

Open For 200 Series Indicators

COMPANY HISTORY

Cardinal officially began operations in 1950 with founder William H. Perry. An experienced scale industry man from Webb City, Missouri, Perry created a new line of special capacity scales designed to meet the growing needs of customers during America's construction-era boom.

With builder demand at an all-time high, Perry saw the necessity for improved weighing systems as development of the nation's highways, bridges and structures swept America. As the country postured for vast growth, Perry's scale designs pioneered a new method for batch weighing concrete, stone and asphalt.

As prosperity and progress seized America, Perry was authorized to launch his own company for the production of new, light-capacity scales to be marketed through the Webb Corporation. The response was overwhelming.

Perry's new line of scales proved to be so successful, the long-time employee of the Webb Corporation was compelled to resign his post and devote his full attention to his new and rapidly growing company. And so, Cardinal Scale was born.

Today, the company that emerged as the result of one man's foresight is the leader of industrial scales in that same small Missouri town, where Cardinal Scale calls home.

William H. Perry's vision of responding to the specialized weighing needs of numerous industries enables Cardinal scales to continue expansion of its product line as well as the development of new and innovative weighing technology.

A drive to be the industry leader and an ever-creative spirit led Perry to make two major acquisitions that would further diversify Cardinal's product line over the years. Fuller Weighing Systems became part of the Cardinal family in 1980, giving the pail and drum filler making company the research and development support to become the industry standard of excellence. One year later, Cardinal acquired New York City-based Detecto Scale Company. With roots reaching back to 1900, Detecto was established by three immigrant brothers who serviced the butcher supply business. The Jacobs Brothers branded Detecto as a symbol of superiority in the food industry and clinical field.

The Detecto acquisition in 1981 brought with it an important, new dimension for Cardinal: scale building and experience that dated back to the beginning of the 20th Century.

As Cardinal Scale continues to be the industry forerunner in the 21st Century, the family-owned company in Webb City, Missouri maintains William H. Perry's determination to meet the unique weighing needs of customers and the American spirit of building a product that is second to none.

VISIT US ONLINE

Cardinal Scale is only a click away at **www.cardet.com**, where you have access to the latest product information, including thousands of Cardinal, Detecto, and Fuller product brochures, engineering drawings, certifications, press releases, case studies, pictures, and virtual tours.

BUILDING A BETTER WEIGH

(pictured left to right) Vice-President of Operations Larry Hicks, President David Perry, and Vice-President of Sales & Marketing Fred Cox

Since Cardinal Scale adopted the motto back in 2002, "Building a Better Weigh" has become more than a slogan, it's now a rallying cry for Cardinal Scale employees to create the most innovative weighing products and systems on the market for our customers.

Cardinal Scale offers experienced, personalized customer service and rapid response to consumer input in a way that only the largest independent scale manufacturer in the United States can.

High-quality, accurate weighing products are essential, and increasingly more important has become the ability to connect weighing systems wirelessly and manage that weight data. Cardinal Scale can help, and we've devoted pages 12 and 13 in this catalog to our unique ability to program customized application software and seamlessly connect our weighing systems with industrial control equipment.

Thank you for taking the time to look through our catalog. For more information, please give us a call or visit our Web site.

DIGITAL WEIGHT INDICATORS

MODEL 204

Model 204

- **Large 1"/25 mm High 6-Digit LCD**
- **Gross, Tare, Net Operation**
- **Bidirectional Serial Port**
- **Stainless Steel Enclosure**
- **Custom Label/Ticket Format**
- **Auto Shutoff and Sleep Modes**
- **AC or DC Battery Power**
- **Custom Ticket Slot Available**

Format and print custom tickets with Cardinal's nControl software

Whether you require a permanent installation or a portable scale on the move, the 204 can be powered three ways:

- *AC Power*
- *Alkaline batteries*
- *Rechargeable Ni-Cad batteries*

Dimensions: 8" W x 2.125" D x 6.625" H (20 cm W x 5 cm D x 17 cm H)
Enclosure: NEMA 12/IP55 stainless steel
Resolution: 5,000 divisions
Power: 115 VAC 60 Hz adapter or, 230 VAC 50/60 Hz, or 6 "C" cell alkaline or rechargeable Ni-Cad batteries
Load Cells: Up to 4,350 ohm
Keyboard: 7 keys
Units Conversion: Pounds, kilograms, grams, and ounces

Ideal for floor and bench scales, the 204 is furnished complete with motion detection and a serial printer port that allows a print out of weigh data. The 204 is suitable for desk or wall mount and can be adjusted to any angle for easy viewing with its large, 1" high LCD.

Certificate of Conformance No. **02-016A1** · R76/1992-DK1-02.03 · NOTICE OF APPROVAL AM-5236 REV 1

MODEL 205

- **0.6"/14 mm High 6-Digit LED**
- **Auto Shutoff and Sleep Modes**
- **Pushbutton Tare**
- **Gross, Tare, Net Conversion**
- **Accumulator, Gross, and Net**
- **Selectable Key Lockout**
- **Two Serial Ports**
- **Four Input Lines**

Model 205

The rugged and versatile 205 indicator is ideal for a wide range of weighing needs; whether its paired with bench scales, heavy-duty floor scales, or even truck scales.

Input control lines for remote activation of zero, tare, gross, and print functions give you more control over placement and operation of the indicator. Additionally, Cardinal programmers can custom design applications to fit your specific function.

The stainless steel NEMA 4X/IP66 enclosure ensures accurate, reliable operation in harsh environments.

Dimensions: 9.2" W x 2.75" D x 7.5" H (23 cm W x 7 cm D x 19 cm H)
Enclosure: NEMA 4X/IP66 stainless steel
Max Resolution: NTEP 10,000 (Class III/IIIL)
CANADA 10,000 (Class III/IIIHD)
OIML 10,000 (Class III)
NON-COMMERCIAL 240,000
Power: 90 to 260 VAC, 50 or 60 Hz
Load Cells: Up to 8,350 ohm
Keyboard: 7 keys
Units Conversion: Pounds, pounds/ounces, ounces, tons, kilograms, grams, metric tons, custom

Certificate of Conformance No. **01-011A2** · R76/1992-DK1-01.02 · NOTICE OF APPROVAL AM-5397

MODEL 210

Model 210

- **0.6"/14 mm High 6-Digit LED**
- **Numeric Keypad**
- **Keypad Tare**
- **Piece Count**
- **Checkweighing**
- **Three Preset Weight Comparators**
- **Time/Date - 12 or 24 Hour Formats**
- **Axle Weigher Operation**

Print tab settings make it easy to setup a ticket with the information you need to print. With Cardinal's powerful nControl software you can create two additional custom print formats for truck tickets, weight receipts, and even bar-coded labels to your specifications.

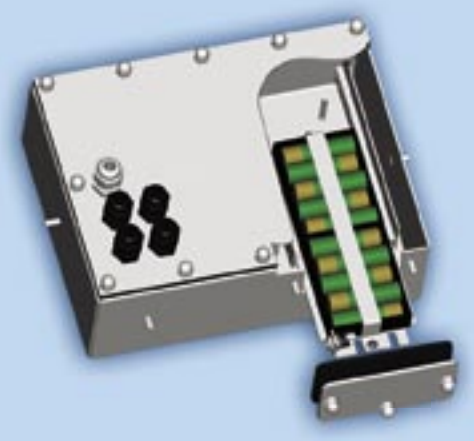
Optional checkweigher lightbar

The latest flash technology is employed which allows the 210 indicator's program to be updated on-site. Dual serial ports provide easy connectivity to a remote display, label printer, ticket printer, or PC.

Dimensions: 9.2" W x 2.75" D x 7.5" H (23 cm W x 7 cm D x 19 cm H)
Enclosure: NEMA 4X/IP66 stainless steel
Max Resolution: NTEP 10,000 (Class III/IIIL)
CANADA 10,000 (Class III/IIIHD)
OIML 10,000 (Class III)
NON-COMMERCIAL 240,000
Power: 90 to 260 VAC, 50 or 60 Hz
Load Cells: Up to 8, 350 ohm
Keyboard: 22 keys
Units Conversion: Pounds, pounds/ounces, ounces, tons, kilograms, grams, metric tons, custom

Certificate of Conformance No. **01-011A2** | OIML R76/1992-DK1-01.02 | NOTICE OF APPROVAL AM-5397 | CE | Australian NSC Approval

MODEL 215



- **Large 1"/25 mm High 6-Digit LCD**
- **10 "AA" Rechargeable Batteries**
- **10 Key Numeric Keypad**
- **Gross, Tare, Net Conversion**
- **Accumulator, Gross, and Net**
- **Axle Weigher Operation**
- **Two Serial Ports**
- **Four Input Lines**

Model 215

Cardinal's model 215 utilizes 10 "AA" rechargeable batteries (not included), easily replaced via the convenient battery cartridge slot on the bottom of the indicator.

The 215's NEMA 4X/IP66 washdown enclosure is versatile and ideal for indoor or outdoor weighing applications with its highly-visible 1" high LCD. It features dual serial ports, multiple print formats, and is field re-programmable via PC.

Connectivity options include analog output, 10/100 Mbps Ethernet TCP/IP, Allen-Bradley® interface, fiber optic port, and Industrial Ethernet/IP.

Dimensions: 9.2" W x 3.125" D x 7.5" H (23 cm W x 8 cm D x 19 cm H)
Enclosure: NEMA 4X/IP66 stainless steel
Max Resolution: NTEP 10,000 (Class III/IIIL)
CANADA 10,000 (Class III/IIIHD)
OIML 10,000 (Class III)
NON-COMMERCIAL 240,000
Battery Operation: 10 "AA" size, NiMH, minimum 2300mAh (batteries not included)
Power: 90 to 264 VAC, 50 or 60 Hz
Load Cells: Up to 8, 350 ohm
Keyboard: 22 keys

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DIGITAL WEIGHT INDICATORS

MODEL 180

Model 180

• 0.56"/14 mm High 6-Digit Red LED • Stainless Steel Construction
• "Legal-For-Trade" • 10 ft (3m) Load Cell Cable Length
• Gross, Tare, Net Conversion • Serial Port • Economical

Dimensions: 7.63" W x 1" D x 3.75" H / 19 cm W x 2 cm D x 10 cm H
Enclosure: NEMA 12/IP55 stainless steel
Max Resolution: 5,000 divisions
Power: 115V - 230 VAC 50/60 Hz Adapter
Load Cells: Up to 4, 350 ohm

Whether your business is food processing or warehousing, shipping or bulk commodities, the economical 180 digital indicator with stainless steel enclosure and swivel mounting bracket can meet your demands at the right price!

Certificate of Conformance Pending

MODEL 210F

Model 210F

• 3"/76 mm High 6-Digit Backlit LCD • Highly Visible in All Lighting
• Tough Fiberglass Enclosure • Waterproof Push Buttons • 6 Annunciators
• Gross, Tare, Net, Lb/Kg Conversion • RS-232/20mA Printer Port

Dimensions: 17.5" W x 7.25" D x 15.25" H / 44 cm W x 18 cm D x 39 cm H
Enclosure: Fiberglass NEMA 4X
Max Resolution: NTEP 10,000 (Class III/IIIL)
CANADA 10,000 (Class III/IIIHD)
OIML 10,000 (Class III)
NON-COMMERCIAL 240,000
Power: 90 to 260 VAC, 50 or 60 Hz
Load Cells: Up to 8, 350 ohm
Units Conversion: Pounds, kilograms, pounds/kilograms

Certificate of Conformance No. **01-011A2**
NOTICE OF APPROVAL AM-5397

MODEL 200

Model 200

• 0.6"/14 mm High 6-Digit LED • Panel Mount • Analog Output Option
• Terminal Block For Easy Connectivity • External Power Supply

Dimensions: 5.67" W x 9.13" D x 2.81" H / 14 cm W x 23 cm D x 71 cm H
Enclosure: Aluminum extrusion
Max Resolution: NTEP 10,000 (Class III/IIIL)
CANADA 10,000 (Class III/IIIHD)
OIML 10,000 (Class III)
NON-COMMERCIAL 240,000
Power: 90 to 260 VAC, 50 or 60 Hz
Load Cells: Up to 8, 350 ohm
Units Conversion: Pounds, pounds/ounces, ounces, tons, kilograms, grams, metric tons

Certificate of Conformance No. **01-011A2**
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MODEL 220

All-Inclusive Power

CHECKWEIGHING

DIGITAL WEIGHT FILTERING (FOR VIBRATING ENVIRONMENTS)

DIGITAL FILL CONTROL SOFTWARE

ISP-IN SYSTEM PROGRAMMING (USER UPGRADEABLE)

WIRELESS COMMUNICATIONS*

INFRARED COMMUNICATIONS

MULTI-INGREDIENT BATCHING

PRODUCT / MATERIAL HANDLING

TCP/IP NETWORKING*

GLASS OR PLASTIC FIBER OPTIC COMMUNICATIONS*

*Features marked with an * are optional.*

- **0.8"/20 mm High 12-Digit Backlit LCD**
- **Full Alphanumeric Keypad**
- **200 IDs With Descriptive Cross-Reference**
- **6 Custom Print Formats For Labels or Tickets**
- **Multiple Report Printing**
- **8 Input And 8 Output Control Lines**
- **Programmable Light Detector Senses Ambient Light To Turn Backlighting on Automatically When Needed**
- **Color-coded Function Keys Reduces Errors From Incorrect Keystroke**

Infrared *allows remote operation.*

Dimensions: 10" W x 4" D x 8" H (25 cm W x 10 cm D x 20 cm H)
Enclosure: NEMA 4X/IP66 stainless steel
Max Resolution: NTEP 10,000 (Class III/IIIL)
CANADA 10,000 (Class III/IIIHD)
OIML 10,000 (Class III)
NON-COMMERCIAL 240,000
Power: 90 to 260 VAC, 50 or 60 Hz
Load Cells: Up to 14,350 ohm
Keyboard: 27 keys
Units Conversion: Pounds, ounces, kilgrams, grams, tons, metric tons, custom
Options: Analog output, external relay I/O, Ethernet, RS-232, Allen Bradley® remote I/O, plastic or glass fiber optics, Bluetooth®, Ethernet/IP

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nControl™

Cardinal's nControl software allows the complete setup of any of the 200 series indicators from a PC (Windows® 2000/XP) or PDA. Save setup configurations and label formats for future downoads to existing or new indicators.

CUSTOM APPLICATION SOFTWARE

Cardinal is one of the only scale manufacturers to provide rapid response custom application software. For those weighing applications that require a little something special that's not standard, Cardinal's programmers can help. And there's no delay and no waiting for EPROMs involved.

Cardinal's 200 series digital weight indicators are Flash upgradeable and can be updated onsite once an application has been e-mailed from Cardinal. An AVR In-System Programmer and laptop are all that's necessary for upgrades out in the field.

If you can imagine it, Cardinal can probably program it. Take advantage of Cardinal's unique rapid response ability in creating custom application software.

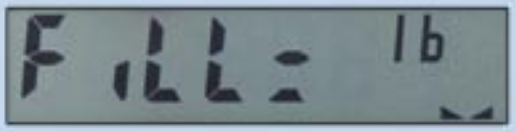
SAMPLE CUSTOM APPLICATIONS

For Models 205/210/215/220 Indicators

- Custom axle weighers.
- Two button axle weigher, a cattle weigher, and a custom Gross/Tare print.
- Limit to one print per weightment.
- Continuously display the highest recorded weight.
- Require entry of operator ID every two hours.
- Allow manual weight entry for Gross, Tare, Net tickets. Driver inputs weight on exit.
- Seven presets and a final cutoff weight for filling totes.
- Allow print on balance when above preset and stable, do not have to go below preset to print again.
- Truck storage with IDs and Gross, Tare, Net tickets weighing axles.
- PWC annunciators and outputs not active until a tare weight is entered.
- Weight hold for cattle.
- Indicator sends out a weight every sample time for the total test time.
- Weighing application for a museum: Factors attendees cost to go to outer space based on their weight.
- Simple truck weigher: Indicator always in gross mode overlays with PRINT GROSS, PRINT TARE.
- "Pay-To-Weigh" application: Weight indicator and remote display are blank until a fee is accepted.

For Model 220 Indicator

- Cattle weighing application: Average weight, number of head, and shrink percentage.
- Printing not allowed until inputs 1 and 2 are not active, optical sensors.
- Consecutive number only incremented on second pass of two pass weigh-ins.
- Gross weight only on the digital analog converter.
- Stay in net mode when digital fill control completes.
- Print Bill of Lading on outbound process.
- Custom batching with 5 formulas.
- Multiple tare storage.
- Custom digital fill control with third preset.
- Print package labels and a pallet total label.
- Work with WINVRS for traffic light control and Threshold values.
- Custom digital fill control with 8 bins.
- Scale weight converted to Troy Ounces and value calculated on current gold price.
- In-motion checkweigher to operate reject arm.
- Store lot number and empty drum weights for digital fill control.
- Audit trail printing.
- Checkweigher with timer before signaling.
- Control 4 traffic lights and 2 traffic barrier gate controls.
- Peak weight printing.



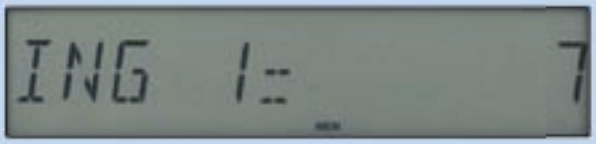
Fish weighing system for pond stocking. Control two gates for fish release.

Checkweigher which does not allow PWC outputs until a specified number of pieces are applied to the scale.

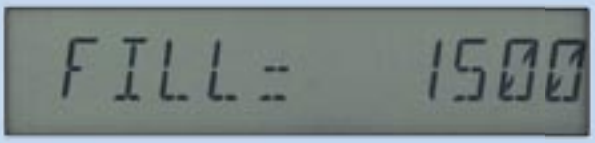
Input a Race ID and Jockey ID and print a fixed format ticket.

Checkweigh operation with hopper fill and dump with dump timer, settle timer, and zero timer.

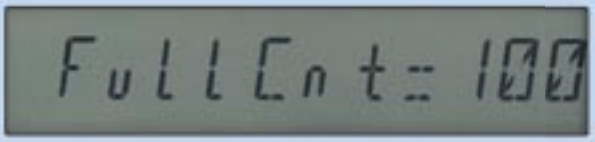
User must enter a PIN for the scale to operate.



Store up to 100 batching formulas with 7 ingredients under IDs.



Fast, Slow and Trim stored to IDs.



Count mode with count and threshold for over and under stored to IDs.

CONNECTIVITY OPTIONS

INDICATOR CONNECTIVITY OPTIONS

2XX-IP
10/100 MB TCP/IP Ethernet

2XX-EIP
Industrial Ethernet

2XX-RS232
Additional bi-directional serial port with handshake

2XX-SFP - serial port, plastic fiber optic

2XX-SFG - serial port, glass fiber optic

SFP1 - serial to fiber plastic converter

SFG1 - serial to fiber glass converter

2XX-AB
Allen-Bradley® option card

RB3 - relay box with 3 solid state relays

RB9 - Relay box with 9 solid state relays

6600-1055
ConnexLink™ RS232 to 900 MHz wireless transceiver. Recommended up to 200 ft.

6600-1056
MaxStream® high power RS232 to 900 MHz wireless transceiver. Recommended up to 500 ft.

6600-1064
Comtrol® DeviceMaster Air
1 serial port to 802.11b wireless Ethernet

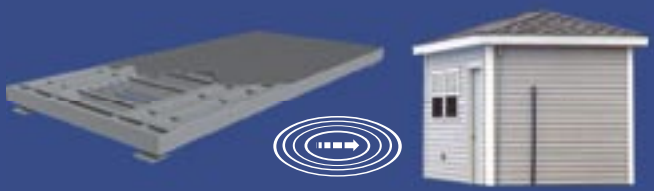
6600-1061
Comtrol® DeviceMaster RTS
1 serial port to Ethernet 10/100 MB

WIRELESS TECHNOLOGIES

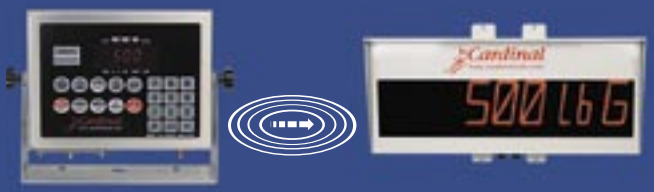
Cardinal allows you to enjoy wireless freedom in your scale installations. If digging up parking lots to bury cable or running lines through buildings doesn't sound appealing to you, then we have an answer. Cardinal's representatives will work with you to define your wireless weighing needs and create a unique solution to allow you to "break free from the ties that bind", whether your application will utilize point to point, 802.11 networking, or Bluetooth®.

Cardinal's wide selection of quality weighing products are adaptable to wireless connectivity and can operate in a point-to-point or point-to-multipoint configuration. Create multiple sub-networks by assigning unique radio addresses to specific device groups. Whether you need to connect weighing products 5 feet or 5 miles apart, give Cardinal a call to see how we can help you in your weighing needs.

UNATTENDED INDICATOR >>> PC - RECORD KEEEPING



SCALE >>> SCALEHOUSE



WEIGHT INDICATOR >>> REMOTE DISPLAY

WEIGHT INDICATOR >>> PDA

PROGRAMMABLE CONTROLLERS

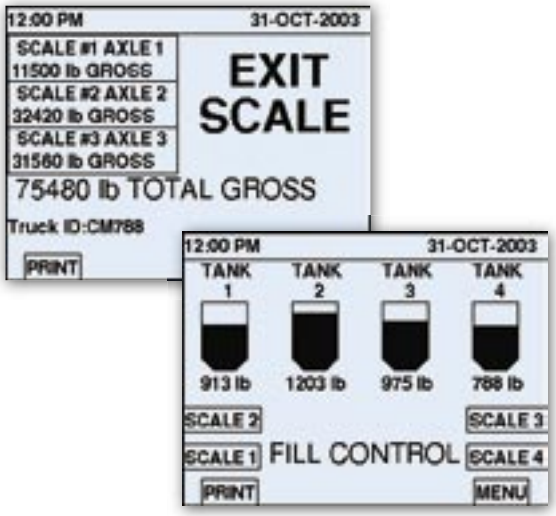
Versatility

From straightforward, simple weighing to complex process automation, the 777 and 788 programmable indicators give you precise control over your weighing needs. With a unique, modular design and tools that simplify programming, the 777 and 788 can fulfill exactly what your application requires. Both come in an optional **NEMA-4X Stainless Steel Enclosure** for extra protection in wet or harsh environments.

Multiple Languages

The 788 has different **language character fonts** which display virtually any language, including Russian, German, Spanish, and Greek.

They're so versatile...



777SCD

A 700 series model is also available with digital load cells. Combine Cardinal's 777SCD digital weight indicator with Smartcell® digital load cells with internal diagnostics for the speed and flexibility of a **fully digital weighing system**. Great for truck or tank scales, the duo allows continuous monitoring and the ability to troubleshoot directly from the indicator.

SmartWeigh

Cardinal's Smartweigh **development software** provides a flexible means of developing application software for the 777 and 788.

...we can't wait to see how you'll use them next!

Cardinal's 700 series now features 8 slots for scale input, optional I/O, and special function cards.

Advanced Enclosure Design

The 700 series features an easy-open enclosure allowing the back panel to be removed with a Phillips-head screwdriver for quick access to internal components.

Connectivity

Utilizing Cardinal's wide range of interface cards, Scale Input, Analog Output, Serial I/O (RS-32/485), Parallel I/O (LPT), Digital I/O (relays), Allen-Bradley RIO, Counters, Ethernet and most Fieldbus type interfaces, we can build a system designed just for you.

Dimensions

Standard Enclosure:
11.125" W x 8.75" D x 9.5" H /
28 cm W x 22 cm D x 24 cm H
NEMA-4X Enclosure:
14.125" W x 6.712" D x 16.858" H /
36 cm W x 17 cm D x 43 cm H

MODEL 788

Large 320 X 240 Resolution, Backlit, Blue LCD Graphics Display And 14 Soft Keys

MODEL 777

4- Line, Backlit, Liquid Crystal Display And 4 Soft Keys

- **Batching**
- **Truck Storage**
- **Food Processing**
- **Digital Fill Control**
- **Multiple Tank Weighing**
- **Multiple Scale Operations**
- **Multi-platform Vehicle Scales**
- **And Many More Possibilities**

Custom labelling capabilities.

Batching

Utilizing the on-screen graphics and soft key technology, the 788 is an excellent solution to batching and process control applications. Whether you require multiple ingredients and formulas, multiple scale inputs, or continuous product filling, the 788 is a process controller you can grow with. Cardinal can create special reports and PC connectivity to provide you with a complete weighing solution. Small font sizes combined with the 788's large 320 x 240 resolution display allow you to view lengthy summary reports directly onscreen.

Material Handling, Food Processing, & Packaging

Ideal for material handling and inventory management applications, the 700 series can provide product identification codes and associated data to track weight and product data. With custom labeling abilities, the 777 and 788 are excellent weight-based controllers for food processing applications. Price Look-Up software is available for the retail packaging of food products. The 700 Series can also send and receive product data from a PC to streamline your material processing operations. You can also connect multiple scales to one weight indicator for the monitoring of weight in production line applications, with custom prompts to guide the operator through the process.

Certificate of Conformance No. **97-077A4**

R76/1992-DK1-01.04

NOTICE OF APPROVAL AM-5204

PRINTERS

Model P220

Model P240

Model P400

Model CTP-1

Model P500

Model P800

Model P801

Model P900

P220 and P240 Thermal Label Printers

The P220 and P240 high quality direct thermal printers are perfect for labeling, feature a flip-up print head for easy media loading or cleaning, and produce high quality characters at 203 dots per inch. The P220 has a print width of 2" and the P240 has a print width of 4". Both feature a print speed of up to 4" per second. Interfacing to Cardinal's indicators via a RS-232 serial port, they can print lines, boxes and graphics. If you require a high quality thermal printer, these models are your answer.

P400 Dot Matrix Ticket Printer

The P400 Ticket Printer is a multifunctional printer capable of printing a variety of tickets. This printer prints on the original and up to 4 copies. Tickets can easily be inserted and removed. Front panel controls permit tickets to be advanced, reversed, or released. Its long-life print mechanism and easy-to-change ink cartridge permit frequent use with no sacrifice in speed or quality of printout.

CTP-1 Dot Matrix Ticket Printer

Cardinal's CTP-1 Dot Matrix Ticket Printer prints up to 2.1 lines per second. Its features include insert ticket and multi copy printing. It interfaces with Cardinal indicators via a RS-232 serial port. Standard serial printer cable provided. Character size is 2.9 mm x 1.6 mm and the printer has 35 columns.

P500 Dot Matrix Tape Printer

The P500 Tape Printer incorporates versatile on-board electronics and has a print speed of up to 4.2 lines per second. These are some of the key features that provide the basis for its ability to be tailored to the simplest or most complex printouts needed for applications such as process control, inventory control, and material handling installations. The printer can be configured for continuous eject tape or can provide individual receipt slips as needed for the weighing installation.

P800 USB Deskjet Printer

The P800 Deskjet Printer is excellent for printing reports from such applications as Cardinal's WinVRS software where full-color graphics reports are necessary. The detail is sharper and the print speed faster than other printer models. Connect via USB or parallel, and the USB connection allows two printers without having to buy additional computer hardware.

P801 USB Laserjet Printer

The P801 Laserjet Printer is an excellent laser printer for users needing high-quality black and white LaserJet printing in a compact size. The P801 delivers up to 14 pages per minute and holds up to 150 sheets. It features 600 dpi x 600 dpi and connects via hi-speed USB. The P801 has a media size of A4 (8.25 in x 11.7 in) and will take up to legal size sheets (8.5 in x 14 in). The P801 has a monthly duty cycle of 5,000 pages.

P900 and P900S Dot Matrix Form Printer

The P900 and P900S Continuous Form Printers are ideal when detailed documents are required such as batching records, process control statistics, or truck weighing records. The durable 9-PIN print head, self-inking ribbon cartridge, and adjustable pin feed mechanism allows these printers to accept an assortment of paper types and sizes with a print speed of 300 CPS. The P900 Printer is furnished with a parallel input while the P900S is supplied with a serial input board.

REMOTE DISPLAYS

Model SB-500

- **Autolearn Mode Allowing Plug-and-play With Virtually Any Digital Indicator**
- **NEMA 4/IP65 Enclosure And Built-in Rain Hood**
- **Mounting Tabs For Easy Installations**

Cardinal's giant NEMA 4/IP65 mild steel SB-500 remote displays are clearly visible for highway applications and flexible enough for use indoors or out. The SB-500M employs message board capabilities for directing vehicles on and off the scale or simply displaying scrolling messages. Cardinal's own *Smart Configuration* software allows custom formats.

SB-500 Remote Display

Character Height: 5" / 13 cm
Character Type:
SB-500 and SB500S — 7-segment, 6-digit with decimal points and three 24-segment alpha characters
SB-500M — Nine 24-segment alpha characters
Dimensions: 32.1" W x 5.5" D x 13.94" H / 81 cm W x 14 cm D x 35 cm H
Annunciators: lb, kg, T, t, G, N (if output from indicator)
Power: 115/230 VAC 50/60 Hz
Viewing Range: up to 250' / 76 m

DAISY-CHAIN MULTIPLE UNITS

Cardinal's SB-500 and SB-250 remote displays have been specially designed to be daisy-chained to other displays which allows multiple weight data to be viewed while being powered by a single weight display.

Model SB500S With Stainless Steel Enclosure

Model SB-250

- **Message Board Standard**
- **Mounting Tabs For Easy Installation**
- **Connect Via Serial, Fiber Optic, Or Ethernet To Your Digital Indicator**

SB-250 Remote Display

The SB-250 employs many of the same features of the SB-500, but in a smaller package. Message board capabilities are standard with all SB-250's and they feature digits 2.6 inches high consisting of an array of nine 5 x 7 alphanumeric characters for clean, crisp readouts of upper and lower case letter messages. Cardinal's proprietary Smart Configuration software allows custom formats. The SB-250 features a built-in rain hood.

Character Height: 2.6" / 7 cm
Character Type: 5 x 7 with descenders and decimal points
Dimensions: 24.7" W x 5.5" D x 9.55" H / 63 cm W x 14 cm D x 24 cm H
Annunciators: lb, kg, T, t, G, N (if output from indicator)
Power: 115/230 VAC 50/60 Hz
Viewing Range: up to 200' / 61 m

Model SB-300

SB-300 Remote Display

Cardinal's SB-300 features a 3" (8 cm) high backlit transflective LCD display and a tough NEMA 4/IP65 fiberglass enclosure making it ideal for operations where weight must be read from a distance or even at night.

Character Height: 3" / 8 cm
Character Type: 6-digit, 7-segment
Dimensions: 18.31" W x 6.75" D x 12" H / 47 cm W x 17 cm D x 31 cm H
Annunciators: Zero, Gross, Net, lb, kg, Motion
Power: 95 to 264 VAC, 60 Hz
Viewing Range: up to 200' / 61 m

Model SB-80

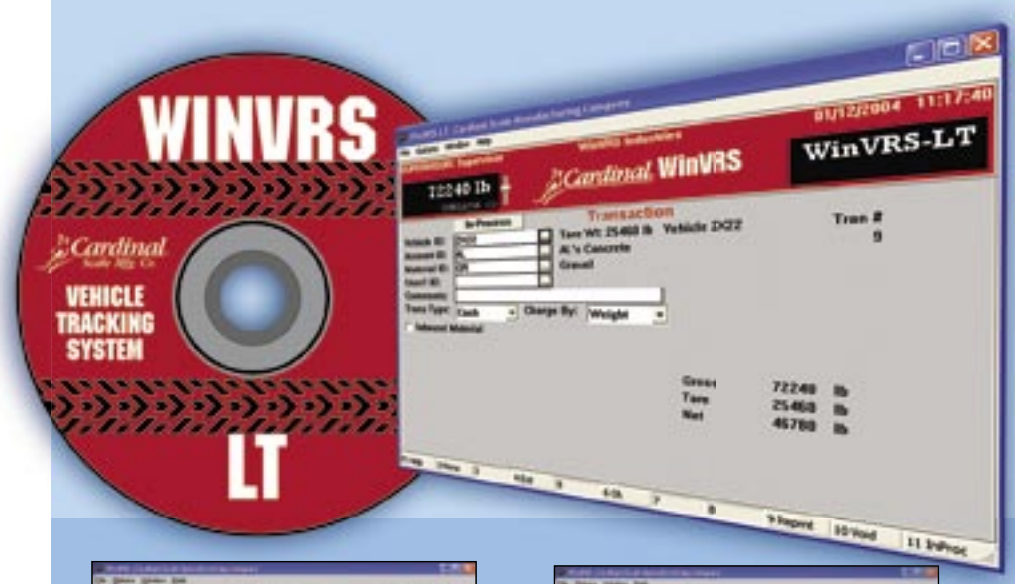
- **Displays Remote Readout And Tracks Digital Weight Indicator**
- **Combination Desk And Wall-mount Stainless Steel Enclosure**

SB-80 Remote Display

For indoor use only, the SB-80 remote display is perfect for warehouse floor scales. It requires a two-wire connection for interface to the digital weight indicator, with a maximum distance of 25 feet from the indicator for RS232 serial connection and 1,000 feet for a 20mA current loop.

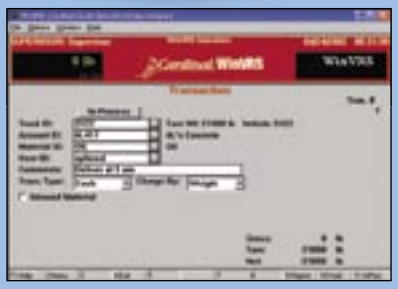
Display: 0.8" / 20 mm high LED, 7 digits (6 for weight, 1 for minus sign)
Dimensions: 7.5" W x 1.32" D x 3.64" H / 19 cm W x 3 cm D x 9 cm H
Annunciators: lb, kg, ZERO
Power: 12 VDC, 300mA adapter (115 VAC, 60 Hz adapter)
Viewing Range: up to 20' / 6 m

WEIGHT MANAGEMENT SOFTWARE



WinVRS-LT

WinVRS-LT Vehicle Recording Software will add efficiency to your truck scale operation at an economical price. WinVRS-LT's easy-to-use Windows®-based system allows for multiple operators and provides detailed reports on vehicles and materials weighed. Order the complete WinVRS-LT system with computer, printer, and one year of technical support, or the software only.



Entering transactions is always just one keystroke away with WinVRS-LT's easy-to-use navigation menu.

Materials may be tracked by weight, unit, or load. Easily enter prices, tax status, and track materials on hand.

WinVRS-LT offers a full complement of reports to track daily operations, including an export utility.

After a weight is placed on the scale and the indicator detects a stable weight, WinDDE sends that weight to a spreadsheet cell.

WinDDE

Dynamic Data Exchange

Easily put YOUR WEIGHT IN WINDOWS® with Cardinal's WinDDE Server

Communicate with up to 20 weight indicators connected to a computer via standard serial port or optional Ethernet (using TCP/IP). WinDDE allows the weight and status of the indicators to be transferred directly into spreadsheets, databases, and industrial control applications by means of Dynamic Data Exchange.

- Continuous monitoring of weight in Excel® while updating bar graphs in real time.
- Threshold weights can be set to automatically capture weight and time/date stamp in Excel® files.
- Capture weight ticket information in Excel® each time the PRINT key is pressed.

Combine Cardinal's 200 and 700 series family of indicators with WinDDE to create a connected weighing system that works for you!

Windows and Excel are registered trademarks of Microsoft Corp.

WinVRS-TOUCH

WinVRS Featuring the Ease of a Plasma Touchscreen Display Without the Need for a Separate Keyboard.

WinVRS At Your Finger Tips!

WinVRS-TOUCH offers all of the same great features as WinVRS Vehicle Recording Software, but comes with larger fonts and buttons for convenient touchscreen navigation. When a user enters into any WinVRS window with input prompts, an on-screen keyboard appears. Pressing the "Symbols" button brings up additional keyboard options (shown to the left).

NETWORKING

WinVRS features workgroup networking for file server networking, useful in sharing data and weight communications on a network. For example, WinVRS a site may have two scales and two computers. Each computer will show both scale #1 and scale #2's weights. During busy times, operators may use both computers to weigh trucks on both scales, and then during less busy times a single operator may work at either computer and use the F3-scale selection key to weigh trucks on both scales. Multiple-site synchronization is available for sites to operate independently, but synchronize their data using the Internet.

ACCOUNTING

Interface available for Quickbooks®, Peachtree®, Redwing®, and others. Invoices may be configured for each transaction to create an invoice or groupings so that transactions for a day, week, or month for a customer are grouped into a single invoice. Cash, check, and credit card transactions may be imported into sales receipts for tracking and reporting.

REPORTING

Reporting is provided using the powerful Crystal Reports® engine. Chronological Transaction Log, Vehicle Log, Vehicle Summary, Material Summary, Account Log, Account Summary, Account Detail Summary, Owner Log, Owner Summary, and many others are provided standard. Custom reports may be purchased from Cardinal, or customer or dealer may purchase report generator option to create or modify reports. Reports may be exported to Excel®, Acrobat®, Word®, HTML, and many other formats.

CUSTOMIZATION

Formatter-customize utility provides a speedy way for Cardinal to customize many aspects of operations. Additional database fields may be added. Display screens may be customized. For example, additional tax fields may be added and calculations updated to include additional taxes.

WEIGHT MANAGEMENT SOFTWARE

LEGAL FOR TRADE

Cert. No. 05-029

Cardinal's powerful WinVRS software keeps traffic moving over your scale by providing fast, accurate collection of data on vehicles, accounts, orders, and materials. Unique, user-defined fields allow you to easily configure the system to meet your needs. A wide range of reports are available to provide period histories, material totals, customer information and more. WinVRS's convenient file utilities menu allows data to be exported to other applications such as accounting and materials control.

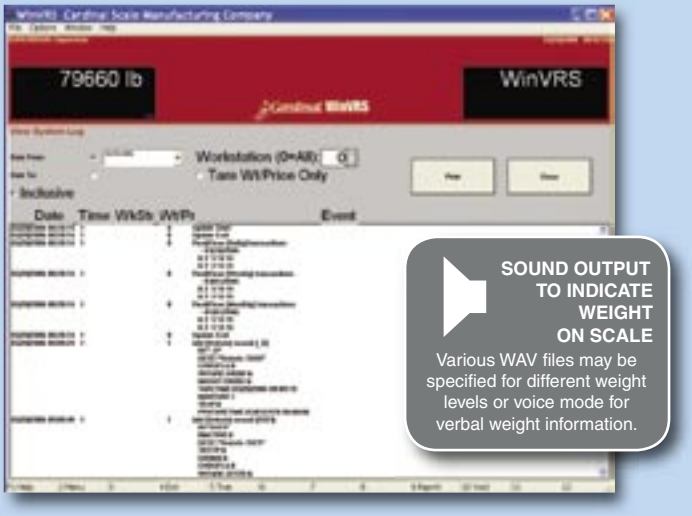
WinVRS features multiple-material transactions. For example, a landfill may charge a per ton price for dumping plus a per unit price for tires. A single transaction ticket will show both charges and totals.

Cardinal specializes in aftermarket support. All WinVRS systems include a full year's support from Cardinal's technical support group, who can connect directly to your system for system diagnostics and application analysis from your location.

VEHICLE RECORDING SYSTEM

Optimized for Windows 2000 and XP®

Ideal for Power Plants, Sand and Gravel, Concrete, Asphalt, Recycling Centers, Transfer Stations, Landfills, Agricultural Industry, and Warehouse Applications.


79660 lb
WinVRS
SOUND OUTPUT TO INDICATE WEIGHT ON SCALE
Various WAV files may be specified for different weight levels or voice mode for verbal weight information.

SECURITY AND EVENT LOGGING

Operator profiles may be configured for various levels of access. WinVRS's system log maintains record of all database item changes, transactions voiding, editing, and posting.

IMAGE FILE ASSOCIATION WITH ITEMS

For example, in the WinVRS material list view an image may be associated with each material easing operator usage and increasing accuracy selecting the appropriate material.

UNATTENDED WEIGHING OPERATIONS

Cardinal's Unattended Systems provide an effective solution for unmanned vehicle weight management that is fast, accurate and easy to operate. Cardinal can also custom design the system to meet the specific requirements of your operation.

Featuring the model 777 or 788 programmable indicators with truck storage software in a weatherproof outdoor enclosure, the system is available with barcode badge reader or proximity badge reader, and/or ticket printer (proximity badge reader and ticket printer option pictured above).

Cardinal's unattended weighing systems may be interfaced with WinVRS software for a complete vehicle weight management system. The WinVRS computer may be located any distance from the scale connecting via short haul modems or RF modems. With a wide variety of arrangements, please consult a Cardinal representative to discuss application requirements and for complete specifications.

IDEAL FOR:

- Truck Stops
- Transfer Stations
- Landfills
- Quarries
- Recycling

Cut Operating Costs with a Fully Automated Vehicle Weighing System

Enclosure: NEMA 3 post mount with rain hood, fluorescent light, heater, and thermostat
Instrument: model 777 or 788 programmable weight indicator
Software: Cardinal truck storage program
Power: 110 VAC

Options:

- Custom software programming
- Scoreboard display
- Traffic light
- Cutbar ticket printer - 3.25" wide paper rolls
- Bar code badge reader
- Proximity badge reader
  (with varying ranges - either 6-8 inches or 9-11 feet)
- Transaction video capture
  (with black and white or color systems)
- Additional scale input cards
- Analog output
- Additional I/O ports

INTELLIGENT JUNCTION BOX

ENJOY THE BENEFITS OF DIGITAL TECHNOLOGY

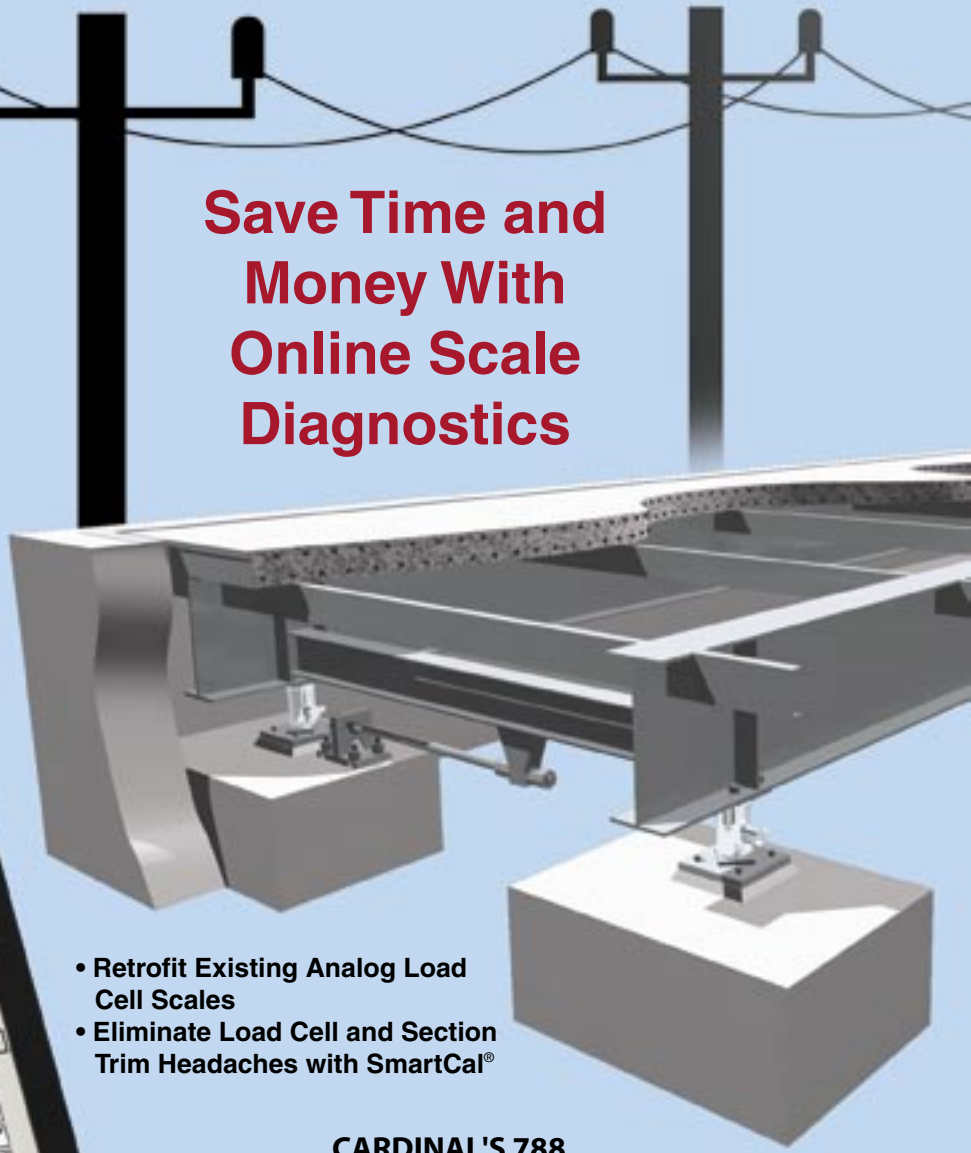
Cardinal's iCan system provides a digitally-controlled, high-performance weighing and diagnostic environment for your scale where every step from installation to operation to maintenance is not only simplified, but closely monitored by the latest ISP flash micro-controller-based circuitry and reported using advanced internationally standardized CAN serial bus. What this means is the cost of ownership for your scale just got smaller since system faults are automatically detected and reported, resulting in less downtime and fewer service calls.

DIAGNOSTIC DISPLAY IN THE BOX

The iCan diagnostic display provides a scale-side weight indicator where the scale technician is working thus saving them time going back and forth to the indicator which saves you service call money. The on-board display provides a 6-digit display of load cell millivolt output, weight, and total scale weight while a single character identifies the load cell source.

The iCan system controller module is housed in a IP66/NEMA 4X junction box and is connected to the 788 indicator with transient-free plastic fiber optic cable, twisted-pair copper wire, or optional glass fiber optic cable.

Save Time and Money With Online Scale Diagnostics



- **Retrofit Existing Analog Load Cell Scales**
- **Eliminate Load Cell and Section Trim Headaches with SmartCal®**

CARDINAL'S 788 PROGRAMMABLE INDICATOR AND ICAN

The 788 indicator provides on-screen viewing of individual load cell report data, ensuring quick and concise information on your scale's performance. Cardinal's patented SmartCal® feature allows quick single-pass calibration without the need for manual adjustments. iCan's diagnostic software automatically identifies and reports potential problems before they can interrupt your weighing operations.

REMOTE MONITORING SOFTWARE

Connect a Scale with iSite Long Distance via TCP/IP or Dial-up Modem

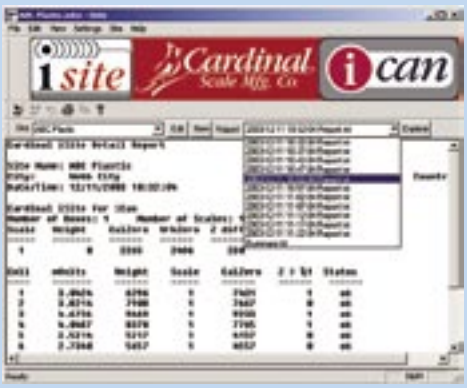
APPLICATIONS

- Multiple Cells - Single Scale
- Multiple Scales - Single Cell
- Multiple Cells - Multiple Scales

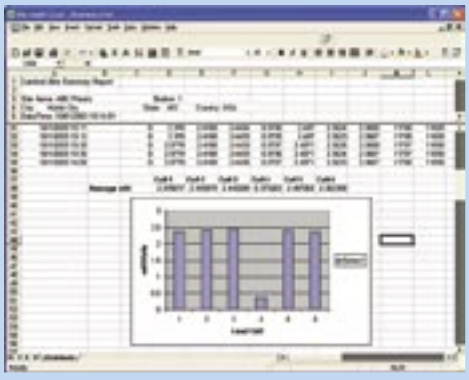
REMOTE MONITORING OF SCALE PERFORMANCE

Cardinal's iSite software and hardware facilitates electronic communications from dealer or support locations to iCan scale sites. The communications can be performed via network TCP/IP connections, direct serial port connections, or dial-up modem connections.

Status reports may be electronically requested from each iCan site at any time. These reports include weight information and millivolt readings for each load cell of each scale. An automatic request feature may be used to obtain new status reports from a site automatically at a specified interval.

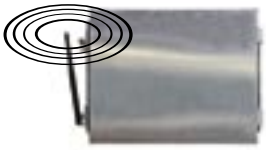


iSite software automatically updates a summary report for each site as individual reports are requested. The summary report for a site provides quick comparison of load cell readings over the history of the site, and may be opened with Excel®.



WIRELESS iCan

- Reduced Installation Costs.
- No Trench or Long Conduit Runs Required.
- Important For Retrofitting.
- No More Rewiring Existing Scale Installations.



Certificate of Conformance No. **03-108**

OIML DK 0199-R76-03.06

iCan Certifications

MEASUREMENT CANADA NOTICE OF APPROVAL PENDING

CE

TOP 10 REASONS TO BUY A CARDINAL TRUCK SCALE

1

Reduce Risk With Single Source Manufacturing:
When you purchase a truck scale it is important to consider availability and warranty concerning ALL the product's components. Cardinal Scale produces and warrants every component in the scale including the load cells, electronic junction boxes and the weight instrument. All of this gives you, the buyer, the minimum risk in a long term investment.

2

Stainless Steel Load Cells:
The most significant component of a truck scale is the load cell. Cardinal Scale boasts the most advanced load cell production facility in the United States. Our load cells are individually tested to meet and exceed design parameters and are 100% stainless steel and environmentally-sealed to insure that your scale performs well even in the harshest environment.

3

Superior Bridge Design:
Cardinal Scale utilizes a robot welding system to insure continuity of all welding and fabrication. With over 55 years of high capacity scale experience, Cardinal truck scales are well known for having many years of reliable operation.

4

Exterior Scale Protection:
All of the steel utilized in our scales is shot blasted and then painted with a baked-on, two-part Sherwin Williams Epolon™ II epoxy. This is unmatched for total environmental protection.

5

Weight Indicators:
Cardinal Scale produces a complete range of weight indicators designed to meet any operational sequence you require for your business. Many of these instruments are designed with NEMA 4X enclosures for added protection in the harsh environments truck scales operate in. Cardinal's wireless truck scales can even eliminate costly construction work on your site, eliminating the need to run cumbersome lines and dig trenches across the facility.

6

Stainless Steel Electronics Boxes:
Cardinal Scale adds value where you least expect it. Our electronic junction boxes feature stainless steel NEMA 4X protection to prevent weather from affecting the way your scale performs.

7

Automated Systems Design:
Whether you require unattended operation, special materials tracking, multiple scales for in and out weighing, or bar code scanners, Cardinal Scale can customize our products to work exactly like you need them. We won't change the way you do things, we will make what you do more efficient.

8

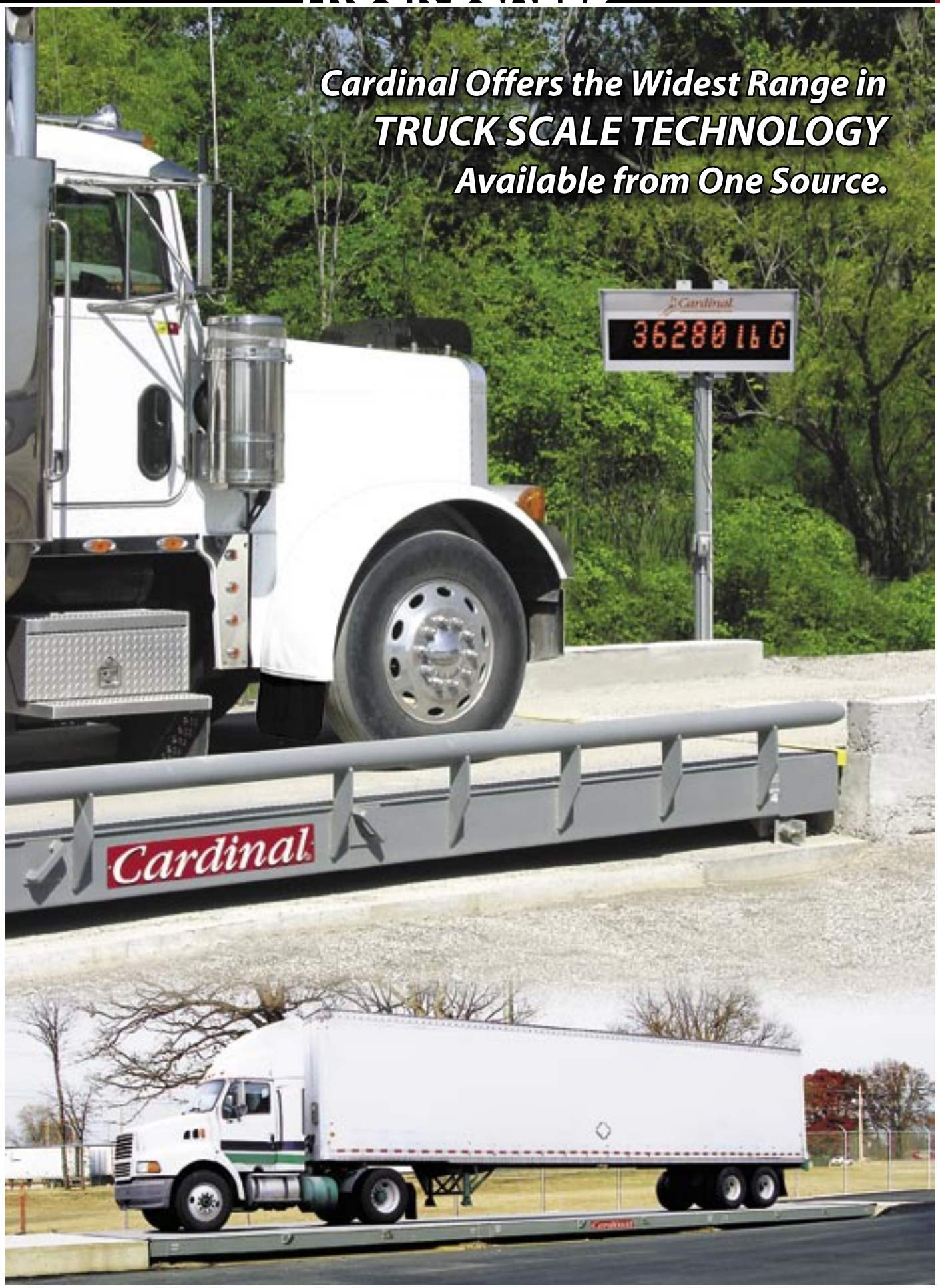
Premium Security Of Operation:
The Cardinal iCan fiber optic load cell system can provide you with added service support when you need it most and further protect you from unnecessary down time. The iCan system is designed to alert you of errors in the weighing components. The fiber optic cabling provides further protection against voltage surges and lightning strikes. Additionally, Cardinal offers iSite remote diagnostic software for monitoring your scale from anywhere in the world via an internet connection. Reduce your risk with Cardinal's iCan.

9

5 Year Bridge-And-Below Warranty:
To give you peace of mind and ensure that you make the best buying decision by using Cardinal products, we proudly boast a 5-year warranty covering manufacturer defects in the weighbridge and electronic components under the scale.

10

Made In The USA:
You have the chance to purchase from a U.S. manufacturer with over 50 years of truck scale manufacturing experience. Your risk is eliminated when you own a Cardinal truck scale. You have only one source and one call to make for new products and service support. Cardinal is an ISO 9001:2000 registered company. Design, manufacture, and service are all part of our quality oriented philosophy.


Cardinal Offers the Widest Range in
TRUCK SCALE TECHNOLOGY
Available from One Source.
Cardinal
Cardinal
362801 6 G
Cardinal

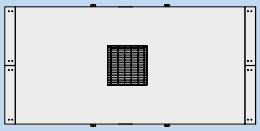
ELECTRONIC LOW-PROFILE TRUCK SCALES

Pitless Truck Scales with Compression Load Cells

Over 55 years of scale design expertise are incorporated into these scales. Select from a wide variety of popular capacities and platform size available in both Cardinal's checkered steel deck or the pour-in-place models, or have Cardinal custom build one to fit your size needs.

Cardinal's heavy-duty PRC truck scales will get you weighing fast! They employ a pitless, low-profile design that has stood the test of time. Fabricated modules minimize height and maximize strength in Cardinal's low-profile vehicles scales. The weighbridge is created using proven computer aided design employing high strength steel members to attain the optimum strength-to-weight ratio. Vehicle loading is supported by heavy-duty structural members placed in strategic locations. Rigid support for the checkered steel deck plates is provided by cross members and other lateral structural members.

The fully assembled weighbridge modules arrive at your site ready to be lifted and then lowered into position. The load cell mounts are self-positioning to correct for misalignment. Available in steel or concrete deck designs, these scales offer strength, quality, and dependable accuracy. A wide variety of capacities and platforms are available, and if you don't see a size listed below for your needs, Cardinal will custom build one at a competitive price. You're not forced into buying a scale that is too large.

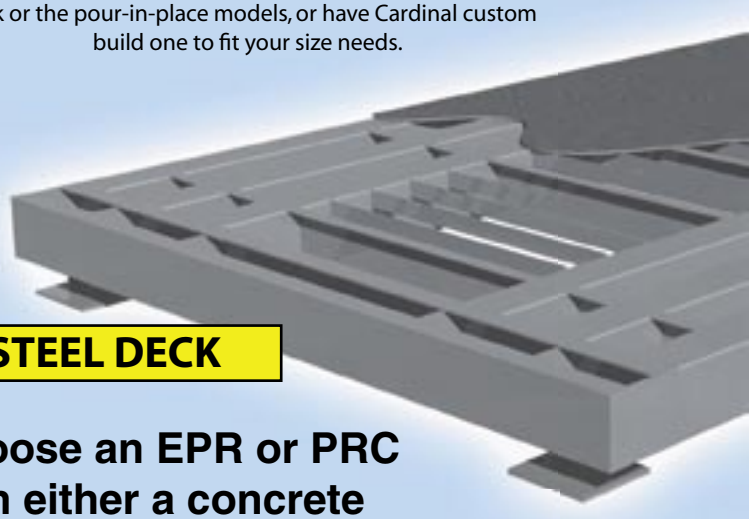


Grain Dump Option available on all Cardinal truck scales
(overhead diagram shown to the left)

PRC Steel Deck - Low-Profile Truck Scales

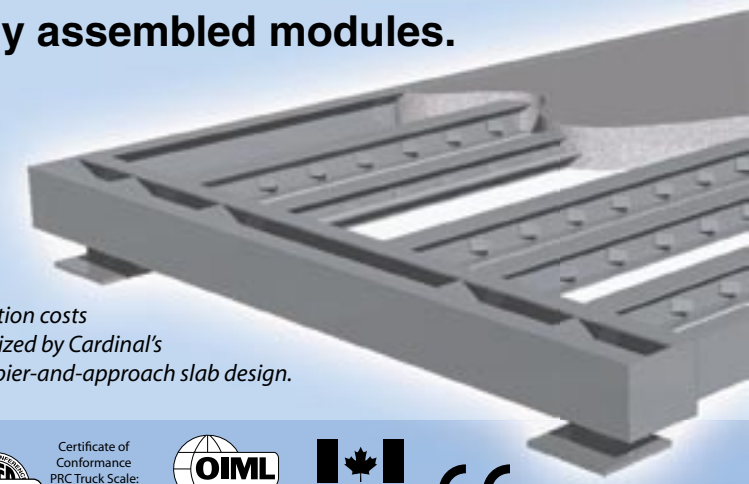
MODEL	PLATFORM SIZE	TONS CAPACITY	CLC* TONS
3010PRC-I	10' x 11'	30	30
3020PRC-I	20' x 11'	30	30
6040PRC-I	40' x 11'	60	40
8050PRC-I	50' x 11'	80	40
10060PRC-I	60' x 11'	100	40
13570PRC-I	70' x 11'	135	40
13580PRC-I	80' x 11'	135	40
13590PRC-I	90' x 11'	135	40
135100PRC-I	100' x 11'	135	40
135120PRC-I	120' x 11'	135	40

Other sizes and capacities readily available.
*** Add "-C" after "I" in the model to denote a* ***CONCRETE DECK.***
**** CLC = Concentrated Load Capacity:*** *The maximum axle-load concentration for a group of two axles with a center line spaced 4' apart and an axle width of 8' that can safely be applied to the scale.*



STEEL DECK

Choose an EPR or PRC with either a concrete deck or steel deck. Fully assembled modules.



Lower installation costs are realized by Cardinal's simple pier-and-approach slab design.

Certificate of Conformance PRC Truck Scale: **95-162** SCA Load Cell: **89-042**

SCA Load Cell: R60/1991-DK-96.05

Notice of Approval AM-4890

Model SCA load cell

PRC - COMPRESSION LOAD CELLS

The PRC series incorporates Cardinal's model SCA all-stainless steel, environmentally sealed, compression load cell designed to ISO guidelines and NIST specifications for exteme accuracy. The SCA load cell is designed for rugged day-to-day use in heavy capacity applications. The PRC scale includes a movement restraint system to protect key components from damage while providing the accuracy you require. With many years of proven reliability, the PRC with Cardinal SCA stainless steel load cells is a truck scale you can rely on.

Pitless Truck Scales with Double-Link Suspension

ALL STEEL. ALL CARDINAL.

- **Automatic Robotic Welders Ensure Strength And Uniformity**
- **Durable Steel Deck**
- **Baked-On Epoxy Coating**
- **Stainless Steel Load Cells**
- **Ground Kit, T-Belt, and Approach Coping All Included**

CONCRETE DECK

The structural steel is shot blasted to an SSPC-SP6 condition to remove rust and mill scale, then protected with a Sherwin Williams EPOLON™ II epoxy coating for the highest quality.

IF YOU ARE CONSIDERING A TRUCK SCALE, CARDINAL SHOULD BE YOUR FIRST CHOICE!

Certificate of Conformance EPR Truck Scale: **97-093** DB Load Cell: **97-133**

DB Load Cell: R60/1991-DK-99.01

Notice of Approval AM-4890

Model DB load cell

EPR - DOUBLE-LINK SUSPENSION

The EPR series scale utilizes Cardinal's all-stainless steel, environmentally sealed model DB double-ended shear beam load cells. The EPR's double link suspension system is designed to further protect sensitive scale components from wear and tear in heavy-duty use. Cardinal's load cells and suspension system eliminate side loading and movement checking devices, which can affect accuracy. EPR electronic components in this scale deck are protected from tough environments in stainless steel junction boxes.

Cardinal's EPR Series truck scales utilize an interlocking yoke and pin, "No Bolt" assembly. Installation is simple - just assemble the modules in place, then install the load cells and suspension assemblies. The low-profile design allows easy access to the load cells and wiring, making installation and maintenance a snap.

EPR Steel Deck - Low-Profile Truck Scales

MODEL	PLATFORM SIZE	TONS CAPACITY	CLC* TONS
3020-EPR	20' x 11'	30	30
6040-EPR	40' x 11'	60	30
7050-EPR	50' x 11'	70	30
10060-EPR	60' x 11'	100	30
10070-EPR	70' x 11'	100	30
10075-EPR	75' x 11'	100	30
10080-EPR	80' x 11'	100	30
10090-EPR	90' x 11'	100	30
100100-EPR	100' x 11'	100	30
100120-EPR	120' x 11'	100	30
4020-EPR	20' x 11'	40	40
7040-EPR	40' x 11'	70	40
8050-EPR	50' x 11'	80	40
11060-EPR	60' x 11'	110	40
13570-EPR	70' x 11'	135	40
13580-EPR	80' x 11'	135	40
13590-EPR	90' x 11'	135	40
135100-EPR	100' x 11'	135	40
135120-EPR	120' x 11'	135	40
8050-EPR14	50' x 14'	80	45
11060-EPR14	60' x 14'	110	45
13570-EPR14	70' x 14'	135	45
13580-EPR14	80' x 14'	135	45

Other sizes and capacities readily available.
*** Add "-C" after "EPR" in the model to denote a **CONCRETE DECK.***
**** CLC = Concentrated Load Capacity:** The maximum axle-load concentration for a group of two axles with a center line spaced 4' apart and an axle width of 8' that can safely be applied to the scale.*

HYDRAULIC TRUCK SCALES

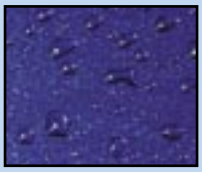
SEVERE-DUTY RATED PROTECTION

LIGHTNING AND POWER SURGES

Cardinal's Guardian truck scale is immune to electrical surges, power failures, stray voltages, and lightning strikes giving you an unprecedented level of protection.

SHOCK LOADING

The Guardian truck scale has built-in shock absorption due to the fact that the pressure transducers are isolated from the scale and located in an indoor enclosure far away from the scale itself.



WATER DAMAGE

The Guardian will operate completely submerged in water. Steam and humidity have no effect on scale operation, because all vulnerable electronic components are housed away from harsh climates.

RODENT DAMAGE

The Guardian's copper tubing is protected against rodent damage. Rodents enjoy chewing on typical electronic load cell cables and can cause extensive damage and costly load cell replacements.

ADVANTAGES

Guardian Steel Deck Hydraulic Truck Scale Models

MODEL	PLATFORM SIZE	TONS CAPACITY	CLC* TONS
H3020-EPR	20' x 11'	30	30
H6040-EPR	40' x 11'	60	30
H7050-EPR	50' x 11'	70	30
H10060-EPR	60' x 11'	100	30
H10070-EPR	70' x 11'	100	30
H10075-EPR	75' x 11'	100	30
H10080-EPR	80' x 11'	100	30
H10090-EPR	90' x 11'	100	30
H100100-EPR	100' x 11'	100	30
H100120-EPR	120' x 11'	100	30
H4020-EPR	20' x 11'	40	40
H7040-EPR	40' x 11'	70	40
H8050-EPR	50' x 11'	80	40
H11060-EPR	60' x 11'	110	40
H13570-EPR	70' x 11'	135	40
H13580-EPR	80' x 11'	135	40
H13590-EPR	90' x 11'	135	40
H135100-EPR	100' x 11'	135	40
H135120-EPR	120' x 11'	135	40

*** Add "-C" after "EPR" in the model to denote a **CONCRETE DECK.***
**** CLC = Concentrated Load Capacity:** The maximum axle-load concentration for a group of two axles with a center line spaced 4' apart and an axle width of 8' that can safely be applied to the scale.*

WE PROVIDE MORE INSURANCE For Your Investment

Cardinal's Guardian Hydraulic Truck Scales are ideal for the solid waste, aggregate, chemical, grain, and construction industries because they are immune to many of the conditions that can adversely affect truck scale installations. Water, lightning, power surges, explosive areas, corrosion, welding, shock loading, extreme temperature fluctuations and even rodents can cause scale problems, all at a cost to the owner. Cardinal's Guardian Hydraulic Truck Scale provides a superior level of performance which protects the scale against these conditions.

The Guardian's all-stainless steel hydraulic compression load cells are geared for applications requiring superb accuracy in a hostile environment.

The Ultimate in Vehicle Scale Protection

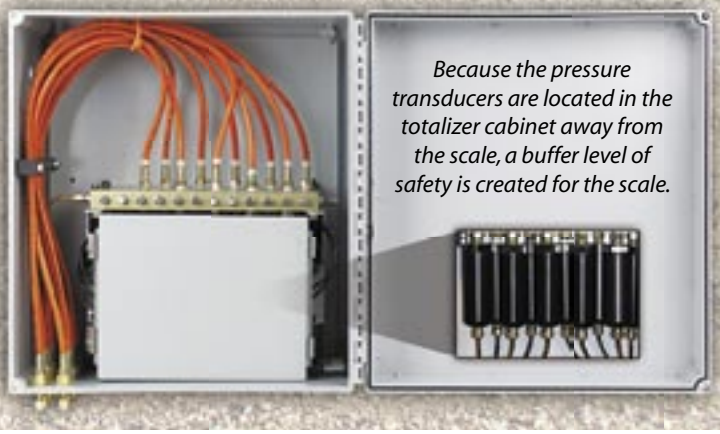
THE GUARDIAN

Hydraulic loads cells are the most rugged and long-lasting weighing device available in the scale market. Cardinal's extensive truck scale experience has culminated in developing The Guardian Hydraulic Truck Scale, the most dependable truck scale you can buy.

NATIONAL CONFERENCE ON WEIGHTS AND MEASURES
LEGAL FOR TRADE

Cert. No.
Load Cell:
05-076
Truck Scale:
97-093

The Cardinal model PTG-3K Pressure Transducers, located near the Cardinal weight indicator, are fluidly coupled to the SST hydraulic load cell to convert the pressure signal into an electrical signal.



Because the pressure transducers are located in the totalizer cabinet away from the scale, a buffer level of safety is created for the scale.

ELECTRONIC PIT AND AXLE LOAD SCALES

Through simple pit installation, the concrete deck weighbridge in Cardinal's Electronic Pit Type Truck Scale is supported by SCA compression load cells, which accurately and quickly weigh the truck and its cargo.

Designed For Concrete Deck

MODEL	PLATFORM SIZE	TONS CAPACITY	CLC* TONS
3010ASRC-I	10' x 10'	30	30
3012ASRC-I	12' x 10'	30	30
3024SRC-I	24' x 10'	30	30
5034SRC-I	34' x 10'	50	30
5040SRC-I	40' x 10'	50	30
6050SRC-I	50' x 10'	60	30
10060SRC-I	60' x 10'	100	30
10070SRC-I	70' x 10'	100	30
10080SRC-I	80' x 10'	100	30
100100SRC-I	100' x 10'	100	30
12060SRC-I	60' x 10'	120	40
12070SRC-I	70' x 10'	120	40
12080SRC-I	80' x 10'	120	40
120100SRC-I	100' x 10'	120	40

Other sizes and capacities readily available.
***CLC = Concentrated Load Capacity:** The maximum axle-load concentration for a group of two axles with a center line spaced 4' apart and an axle width of 8' that can safely be applied to the scale.*

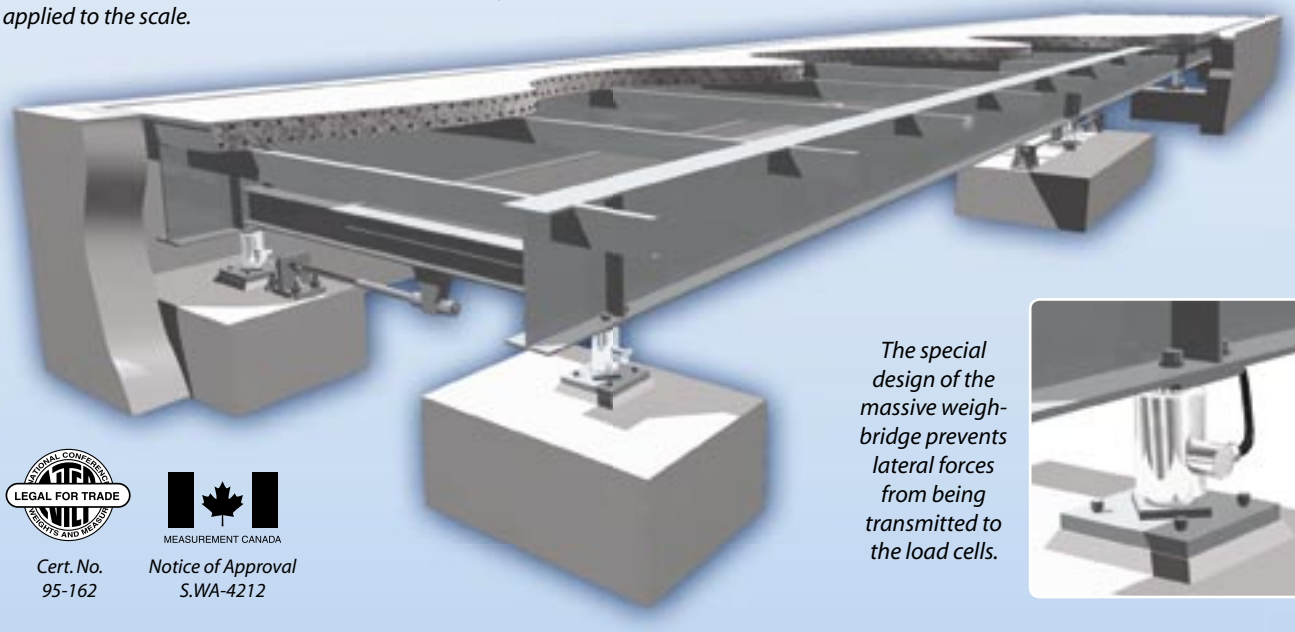
ALL THE RIGHT FEATURES TO MEET YOUR VEHICLE WEIGHING CHALLENGES

No Wear
Unlike many scales of this type, there are no moving or delicate parts to wear or require replacement. Down time is infrequent and performance assured.

Weighbridge
The heavy-duty fabricated steel weighbridge is designed to prevent lateral forces, caused from traffic, from being transmitted to the load cells. A special load cell assembly supports the weighbridge yet permits it to expand or contract when subjected to thermal changes without creating a side load on the load cells. Heavy-duty restraints maintain the weighbridge in proper position under all weighing conditions.

Simple Maintenance
Heavy-duty structural weighbridge design delegates maintenance to simple periodic inspection of the restraint system and the location of load cells with respect to their mounting plates. No greasing or replacement of worn down parts because there is no movement.

ESP Protection
This "ESP" feature - Extra Special Protection - consists of environmentally-sealed, stainless steel load cells coupled with special grounding techniques and voltage suppressors to prevent over-voltage and breakdown of load cells and accompanying truck scale instrumentation.



The special design of the massive weighbridge prevents lateral forces from being transmitted to the load cells.

LEGAL FOR TRADE

Cert. No. 95-162

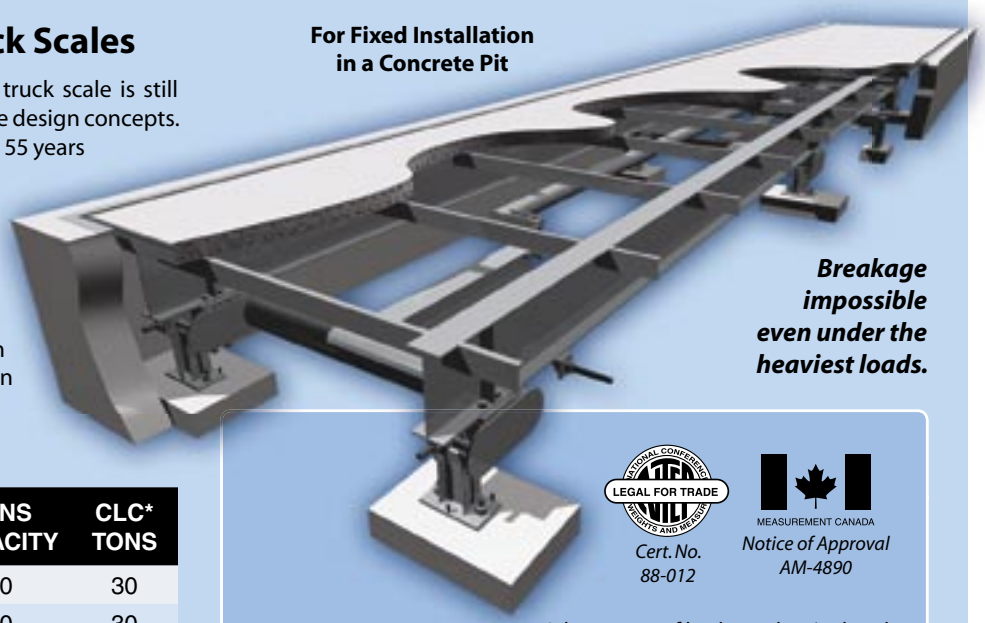
MEASUREMENT CANADA

Notice of Approval S.WA-4212

Electro-Mechanical Truck Scales

This original heavy-duty welded steel truck scale is still considered the benchmark in truck scale design concepts. Thousands of installations over the past 55 years are testimony to its superior quality and long-term accuracy. Since its introduction, Cardinal has continued to modernize and improve its design: only four main levers with one transverse lever on the four section truck scale and two main levers with one transverse lever on the two section truck scale.

For Fixed Installation in a Concrete Pit



Breakage impossible even under the heaviest loads.

Designed For Concrete Deck

MODEL	PLATFORM SIZE	TONS CAPACITY	CLC* TONS
3024SRL	24' x 10'	30	30
40403SRL	40' x 10'	50	30
6050-SRL	50' x 10'	60	30
6060-SRL	60' x 10'	60	30
6070-SRL	70' x 10'	60	30
8050-SRL	50' x 10'	80	45
8060-SRL	60' x 10'	80	45
8070-SRL	70' x 10'	80	45
10060-SRL	60' x 10'	100	60
10070-SRL	70' x 10'	100	60
10080-SRL	80' x 10'	100	60
10090-SRL	90' x 10'	100	60
100100-SRL	100' x 10'	100	60

Other sizes and capacities readily available.
***CLC = Concentrated Load Capacity:** The maximum axle-load concentration for a group of two axles with a center line spaced 4' apart and an axle width of 8' that can safely be applied to the scale.*

LEGAL FOR TRADE

Cert. No. 88-012

MEASUREMENT CANADA

Notice of Approval AM-4890

Advantages of both mechanical and electronic scale systems are combined. With the dependability of the lever system and one Cardinal strain gauge load cell, weight indication and recording instruments can be located away from the scale platform.

Cardinal's Double-Link Suspension System eliminates shock, saves wear on pivots and bearings and prolongs the scale life. The unique suspension construction maintains the bearings in a permanent position on the knife edges and prevents them from rubbing or sliding on the knife edges.

Special Features Show Cardinal's Superiority

- Welded steel construction provides more strength and dependability, which means less downtime, less maintenance, and high shock resistance.
- Pivots operate on a 90° angle with the flow of traffic to assure long, trouble-free performance.
- Fewer levers in the Cardinal design means less maintenance, fewer points of friction and fewer points of calibration error.
- Double-link suspension with hardened contacts points prevent motion of the platform being transmitted to the lever system.
- Longer lifespan.

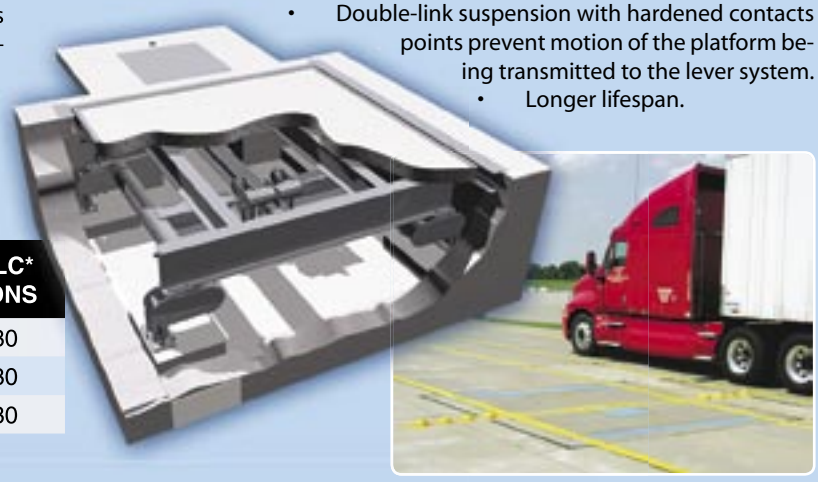
Pit Type Axle Load Scales

You can depend on Cardinal's all-steel welded axle load scales to determine whether individual axle loads are within legal limits. These ruggedly-designed axles load scales are to be permanently installed in a concrete pit and utilize the unique features of Cardinal's truck scales, thus assuring a lifetime of dependable service beyond that which it will receive under the most severe usage.

Axle Load Scales

MODEL	PLATFORM SIZE	TONS CAPACITY	CLC* TONS
3010ASRL	10' x 10'	30	30
3012ASRL	12' x 10'	30	30
3014ASRL	14' x 10'	30	30

Not "Legal for Trade"



PORTABLE MECHANICAL TRUCK SCALES

PRL SERIES
Portable Mechanical Vehicle Scales

- **Single Units or Tandem**
- **Welded Steel Weigbridge and Frame**
- **Cardinal Tandem Connecting System**
- **Lever Design and Excellent Portability**
- **Double-Link Suspension**
- **5/16" Checkered Steel Deck (Wood Optional)**

MEASUREMENT CANADA
Notice of Approval AM-4890

LEGAL FOR TRADE
Cert. No. 88-135

MODEL	PLATFORM SIZE	TONS CAPACITY	CLC* TONS
2020PRL	20' x 10'	20	20
2530PRL	25' x 10'	30	30
3030PRL	30' x 10'	30	30
3540PRL	35' x 10'	40	30
TANDEM CONNECTED			
2525-60PRL	50' x 10'	60	30
3030-60PRL	60' x 10'	60	30
3535-60PRL	70' x 10'	60	30
3030-80PRL	60' x 10'	80	45
3535-80PRL	70' x 10'	80	45
2525-100PRL	50' x 10'	100	60
3030-100PRL	60' x 10'	100	60
3535-100PRL	70' x 10'	100	60

Other sizes and capacities readily available.
***CLC = Concentrated Load Capacity:** The maximum axle-load concentration for a group of two axles with a center line spaced 4' apart and an axle width of 8' that can safely be applied to the scale.*

The PRL Series is a heavy-duty mechanical vehicle scale that is made for endurance and accuracy, while remaining completely self-contained. Tandems units are simply composed of two or more scales of the same or different platform lengths tandem-connected for greater capacity. When split, each unit is a self-contained scale in itself, offering 3-in-1 scale flexibility. The tandem connecting system is simple and patented. Scale sections bolt together quickly for installation or later lengthening of the scale. The 5/16" full checkered steel deck plate is standard and keeps debris from falling into the scale mechanism. Installation is fast and easy, and an optional wood deck is available.

OPTIONAL TRUCK SCALE EQUIPMENT

To complete your truck scale, Cardinal offers a selection of optional accessories, including built-in side rails, manhole covers, protective posts, grain dumps, and stainless steel rodent protection kits. All EPR low-profile truck scales are also available in a side access, smooth deck design or top side access for pit type installations.

4" Diameter Pipe Side Rails (pictured on a model EPR-LF)

Side Access Design (pictured on a model EPR)

EPR-LF SERIES
Portable Low-Profile Vehicle Scales

- **15.5" Overall Height**
- **Self-Contained Construction**
- **Heavy-Duty Checkered Deck Plate**
- **Minimal Installation Costs**

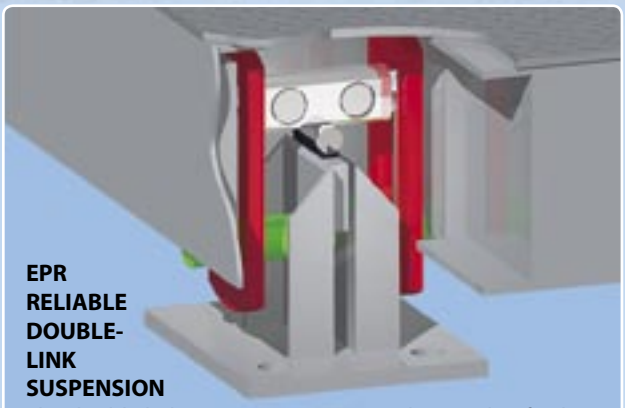
LEGAL FOR TRADE
Cert. No. 97-093

MEASUREMENT CANADA
Notice of Approval AM-4890

Cardinal's EPR-LF portable vehicle scale is the ideal answer when a scale is needed than can be moved to other sites. Industries such as rock quarries, sand and gravel pits, and logging companies must relocate equipment from time to time to maintain efficient product flow. Cardinal's EPR-LF contributes to the ease and efficiency of these moves. The complete scale is contained in modules which are furnished with lifting eyes for easy moving. Simply lift, move, and lower the scale to its new location in minimal time and effort.

MODEL	PLATFORM SIZE	TONS CAPACITY	CLC* TONS
4020-EPR-LF	20' x 10'	40	35
7040-EPR-LF	40' x 10'	70	35
8050-EPR-LF	50' x 10'	80	35
11060-EPR-LF	60' x 10'	110	35
12070-EPR-LF	70' x 10'	120	35
12080-EPR-LF	80' x 10'	120	35

Other sizes and capacities readily available.
***CLC = Concentrated Load Capacity:** The maximum axle-load concentration for a group of two axles with a center line spaced 4' apart and an axle width of 8' that can safely be applied to the scale.*



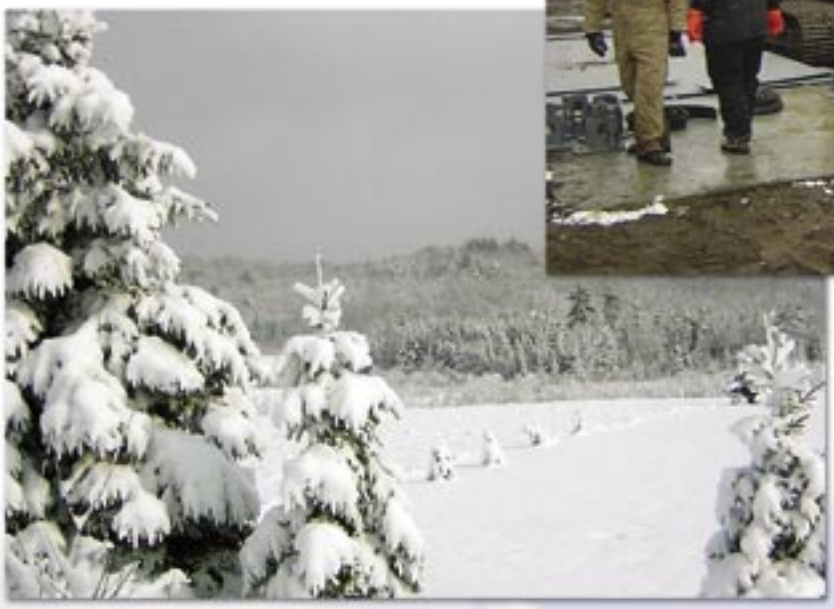
EPR RELIABLE DOUBLE-LINK SUSPENSION
The double link suspension system is designed to further protect sensitive scale components. Cardinal's stainless steel, double-ended shear beam load cells and suspension system eliminate side loading and movement checking devices, which can affect accuracy and reliability.

The scale is completely self-contained. Each scale consists of modules fabricated to minimize overall height and maximize strength. Heavy duty structural tubing is placed in strategic locations to support heavy vehicle loading. Cross members and other lateral structural members provide rigid support for the 5/16" checkered deck plate. A heavy structural steel lower frame supports load cells and ties the scale into one continuous module fabricated and assembled to factory tolerances. Steel bulk heads are integrated into each end of the scale to facilitate swift entrance and exit ramp construction. Load cell wiring is already installed and furnished with quick connections for easy installation and removal.

OFF-ROAD TRUCK SCALES

TOUGH SCALES FOR TOUGH ENVIRONMENTS

- Concrete or steel decks
- CLC - up to 80 tons
- Gross capacity - up to 1 million lbs
- 1/2 inch thick deck plate
- Epoxy painted steel resists corrosion
- Width range from 10 feet to 25 feet
- Lengths to 280 feet or more



Heavy-Duty Scales for Off-Road Vehicles

Although Cardinal has a broad line of standard scale models, they also manufacture custom truck scales of different lengths, widths, and capacities for your special needs.The mining, construction, steel, aggregate, and forestry industries demand rugged, high-quality scales built to unique specifications that will provide dependable performance for extreme duty cycles and accomodate the largest off-road vehicles.

Portable Electronic Axle Load Scales

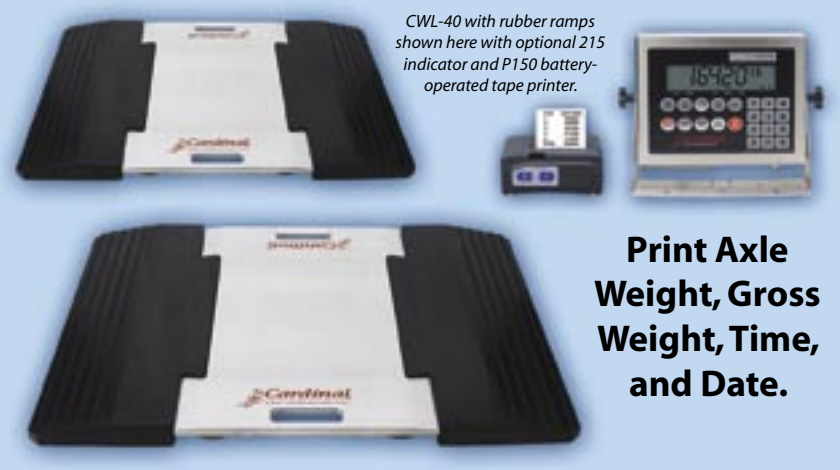
MODEL	NOMINAL CAPACITY	DECK	SHIPPING WEIGHT
CWL-40	20 ton	Aluminum	270 lb / 122 kg

Platform Dimensions: 14″W x 24″L (36 cm W x 61 cm L)
Overall Dimensions With Ramp: 17.5″W x 28″L x 1.7″H (45 cm W x 72 cm L x 4 cm H)
Capacity: 20,000 lb (9,000 kg) per platform or 40,000 lb (18,000 kg) for single axle
Division Size: 20 lb

Model CWL-40

- **Low-profile (1.75 Inch/44mm High) Design With Integral Transport Handle**
- **Six Strain Gauge Load Cell Design**
- **Large Enough To Weigh Dual Axles**
- **Corrosion Resistant**
- **Rechargeable Battery Power**
- **Optional Cigarette Lighter Adapter And Clamps For Car Battery Adapter**

Cardinal's mobile axle weighers are rugged, but light enough for easy transport, weighing in at only 60 pounds per platform. With Cardinal's model P150 battery-operated portable tape printer, you may print axle weight, gross weight, time, and date. The interlocking rubber ramps snap perfectly into place with the CWL-40's unique design.


CWL-40 with rubber ramps shown here with optional 215 indicator and P150 battery-operated tape printer.

Print Axle Weight, Gross Weight, Time, and Date.

Portable Tandem Axle Load Scales

MODEL	NOMINAL CAPACITY	DECK	SHIPPING WEIGHT
760PS	30 ton	Steel	1,765 lb / 800 kg
760PA	30 ton	Aluminum	820 lb / 371 kg

Platform Dimensions: 30″W x 7′L x 5.5″H / 76 cm W x 2 m L x 14 cm H
Overall Dimensions With Ramp: 30″W x 10′L x 5.5″H / 76 cm W x 3 m L x 14 cm H
Capacity: 30,000 lb each platform
- 60,000 lb x 50 lb graduations (for portable installations)
- 60,000 lb x 20 lb graduations (for permanent installations)

- **High Strength**
- **Low Profile**
- **Two Modules**

THE PERFORMANCE WHERE YOU NEED IT WHEN YOU NEED IT

Cardinal Scale's completely portable, two-module, tandem axle load scale is a real lightweight (only 400 lbs per aluminum platform) that handles the real heavyweights (60,000 lb capacity). Each scale comes complete with either steel or aluminum platform, NEMA 4 junction box, environmentally-protected stainless steel load cells, and four access ramps.

Model 760PS
shown here with optional model 210 indicator

WEIGH-IN-MOTION VEHICLE SCALES

Cardinal In-Motion Vehicle Scales provide a means of doing more with less. These scales allow you to weigh vehicles moving at speeds up to 80 mph (130 km/h) making stopping unnecessary. Over-weight trucks can be quickly identified and directed to a static scale for enforcement weighing. Loads can be checked as the truck leaves the terminal or warehouse. Incoming weights can be checked and accumulated without any interruption to the material flow. All Cardinal In-Motion Vehicle Scales meet or exceed the performance requirements for a Type 3 scale as specified in ASTM E1318-02.

Cardinal's staff of engineering and software professionals are available for the design of a complete weight enforcement and traffic control system, while Cardinal service technicians can be at your site within hours, not days or weeks, if needed.

Cardinal's QWIM quartz sensor-based weighing-in-motion scales.

HIGH SPEED WEIGHING

QWIM Series

Cardinal's QWIM series of in-motion scales utilize Kistler Lineas® Quartz-Piezo Sensors that are embedded in the pavement surface. These sensors, only 2-inches in width, have an environmental rating of IP-67, and are capable of weighing vehicles moving at speeds of up to 80 mph (130 km/h). Available in either a single pair or dual pair configuration, the QWIM series of in-motion vehicle scale can be installed and calibrated in less than a single day minimizing lane closures. The QWIM series of in-motion scale is an ideal choice for identifying overweight vehicles at highway speeds. In addition to axle weights, the QWIM also provides axle spacing, vehicle classification, and vehicle speed. A QWIM-1 model with two sets of sensor pairs is available as is a Model QWIM-2 with four sets of sensor pairs when greater accuracy and system redundancy is required. Both models meet or exceed the accuracy requirements for a Type 3 scale as defined in ASTM E1318-02.

PWIM Series

The PWIM series of in-motion scale use WIM-grade piezo sensors to weigh passing vehicles. Like the QWIM series of scale, the PWIM series of in-motion scale can also be installed and calibrated in less than a day. These in-motion scales provide good usable performance while minimizing the system cost. These scales use piezoelectric strips embedded in the pavement surface to measure the vehicle's axle weights, axle spacing, and speed. The sensors may also be attached to the surface of the pavement with a special tape allowing them to be removed later and re-installed at another location. The PWIM series scale is a great cost-effective solution to collecting weight data.

INTERMEDIATE SPEED WEIGHING

CWIM Series

The CWIM series of in-motion vehicle scale is a load cell based permanently mounted scale for weighing vehicles moving at speeds up to 45 mph. This scale consists of two independent platforms each supported by four stainless steel 50,000 pound capacity compression load cells; the same ones that are used in our heavy duty static vehicle scales. This rugged scale is designed for precision weighing and can be used to weigh vehicle axles in a static condition. This scale is ideally suited for use at toll plazas, truck terminals, or most anywhere an axle load scale is needed.

Cardinal's CWIM load cell-based weigh-in-motion scales.

SLOW SPEED WEIGHING

Axle Load Scales

Cardinal offers a variety of axle load scales that may be used either statically or in-motion at speeds up to 10 mph. These precision scales are shorter versions of our full-length vehicle scales and incorporate the same high performance features.

Cardinal's CVM vehicle classifier / weigh-in-motion controller provides up to 8 lanes of classification.

INSTRUMENTATION

CVM Series In-Motion Scale Controller

The CVM series in-motion scale controller is designed for the ITS professional. It includes inputs for charge amplifiers for piezo sensors, inputs from digital sensors and loop detectors. This modular controller includes provisions for operating from either line power, battery, or solar power and offers RS232, RS422, or fiber optic interfaces. LED status indicators show the operation status while a easily removable memory MMC memory card stores up to 1 Gb of data. The CVM in-motion scale controller forms the foundation for a number of system building blocks including high-speed A/D conversion, over-height detection, traffic control and monitoring, vehicle image capture and recording, and others.

MULTI-PLATFORM TRUCK SCALES

Cardinal can manufacture any of their truck scale models in multi-platform configurations, which can weigh multiple axles all in one weighment, allowing the operator to quickly and reliably generate not only "legal-for-trade" gross, tare, and net weights, but also accurate steering, drive and tandem axle weights on every vehicle.

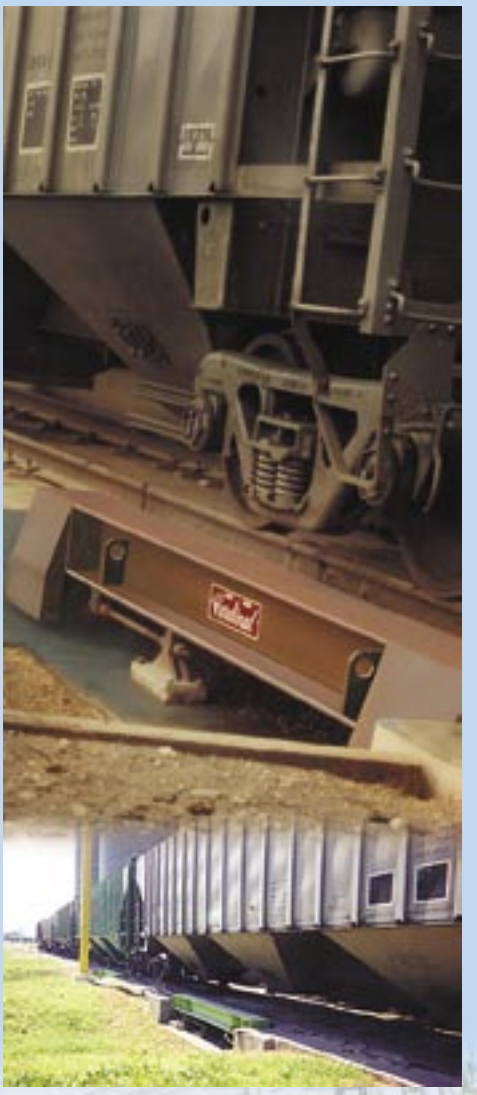
Cardinal is not restricted by pre-configured size specifications, which many other scale companies use, but can custom-build any of their truck scales to meet your specific requirements while maintaining a very competitive price. Cardinal low-profile above ground and pit-type truck scales are available in 10, 11 and 12 foot widths and can be customized to any length and width the customer desires.

Accurate and speedy axle weighing can mean dollars saved in the long run. Let a Cardinal representative speak with you about your multi-platform weighing needs and configure a multi-platform truck scale for your specific requirement.

Cardinal multi-platform scales are a reliable choice for highway weigh station enforcement applications.

Modules may be marked with a painted edge stripe to assist the driver in properly positioning the truck. Each section functions as an independent scale.

RAILROAD TRACK SCALES



Rail Hugger Low-Profile Railway Track Scale

Cardinal's Rail Hugger is engineered to give you the most advanced alternative available in today's railway scales. From its rugged weighbridge to its unique load cell mounting assemblies, the Rail Hugger's solid-state electronic design assures accuracy, dependability and long service. Because it is mounted above ground in a shallow, concrete foundation, there is no worry about shifting ballast resulting in weight errors. As a result, maintenance is minimized and precious track time is rarely interrupted. That translates into money saved.

The Rail Hugger's securely-anchored weighbridge does not permit lateral forces caused from traffic on the platform to be transmitted to the load cell assemblies. The bridge slides over the load cell assemblies so that expansion or contraction due to thermal changes does not create a side load on the cell. Lateral stabilization from the check rods is further assurance of absolute accuracy. And, for routine re-alignment or adjustment, the checkrods are readily accessible. The Rail Hugger's modular nature allows it to be tailored to an almost limitless variety of length needs.

MODEL	GROSS TON CAPACITY	PLATFORM SIZE	SECTION TON CAPACITY	CELL CAPACITY
13-80LPRA-120	100	13'	100	4 @ 120K
1313-80LPRA-120	200	13' and 13'	100	8 @ 120K
26-80LPRA-120	200	26'	100	6 @ 120K
1326-80LPRA-120	200	13' and 26'	100	10 @ 120K
2626-80LPRA-120	200	26' and 26'	100	12 @ 120K
13-80LPRA-200	180	13'	100	4 @ 120K
1313-80LPRA-200	270	13' and 13'	100	8 @ 120K
26-80LPRA-200	270	26'	100	6 @ 120K
1326-80LPRA-200	270	13' and 26'	100	10 @ 120K
2626-80LPRA-200	270	26' and 26'	100	12 @ 120K

E-80 Cooper A.R.E.M.A Rating

Other sizes and capacities readily available. The above models are built to AAR/A.R.E.M.A. Handbook specifications.

Meeting the Demand for Top Performance in all Types of Environments

An economical, heavy-duty combination of accuracy, convenience and efficiency.

Includes steel deck weighbridge, compression load cells and load cell stands, J-boxes and power supplies, digital weight indicator and printer.

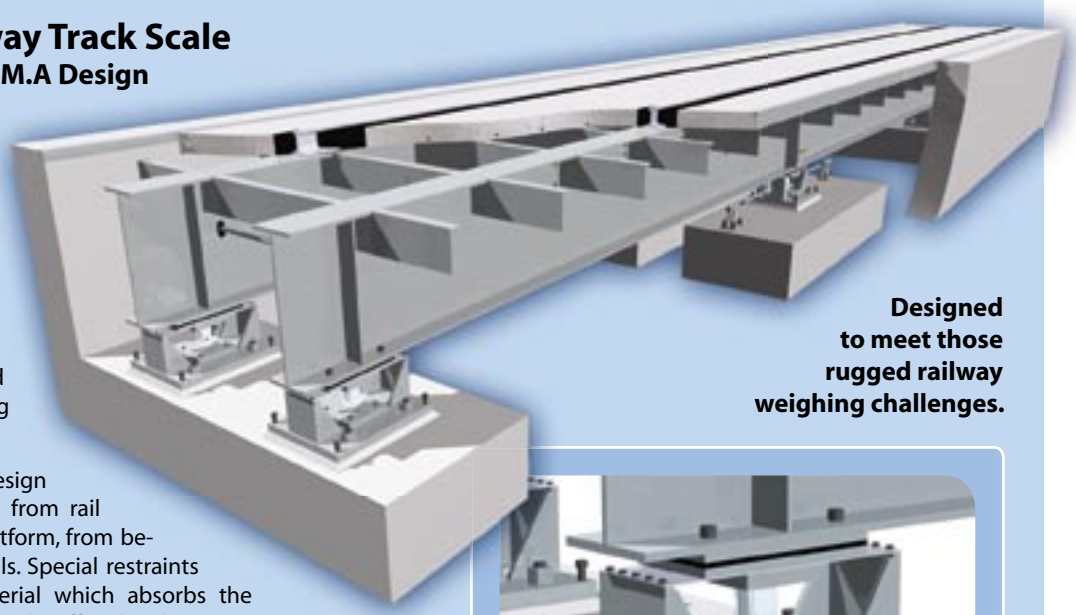
LEGAL FOR TRADE

Cert. No. 93-051

MEASUREMENT CANADA

Notice of Approval S.WA-4458

Pit Electronic Railway Track Scale
Full Floating Deck A.R.E.M.A Design



The massively constructed, heavy steel weighbridge is stabilized laterally and longitudinally with checkrods and other specially designed restraints. Weighrails are sealed into the platform. Special design techniques and manufacturing procedures prevent excessive moisture, dirt and foreign materials from entering the pit.

Designed to meet those rugged railway weighing challenges.

The unique weighbridge design prevents lateral forces, caused from rail traffic going on and off the platform, from being transmitted to the load cells. Special restraints include shock absorbent material which absorbs the shock created from heavy railroad traffic. This design permits the weighbridge to move across the assembly when necessary, so that if expansion or contraction of the weighbridge occurs, it does not create a side load on the load cells. In effect, the weighbridge floats on top of the assemblies and is held in proper position by heavy-duty checkrods.The stainless steel load cells are hermetically sealed against moisture. Standard graduations of the digital weight indicator is 50 lb. Please consult a Cardinal representative for the option of 20 lb graduations.

The heavy-duty weighbridge design coupled with rugged load cells and mounting assemblies make the Cardinal Pit Type Electronic Railroad Track Scale the logical choice for virtually every railway weighing need.

MODEL	GROSS TON CAPACITY	PLATFORM SIZE	SECTION TON CAPACITY	CELL CAPACITY
6080-RSCA	270	60' x 10'	180	8 @ 200K
6680-RSCA	270	66' x 10'	180	8 @ 200K
7280-RSCA	270	72' x 10'	180	8 @ 200K

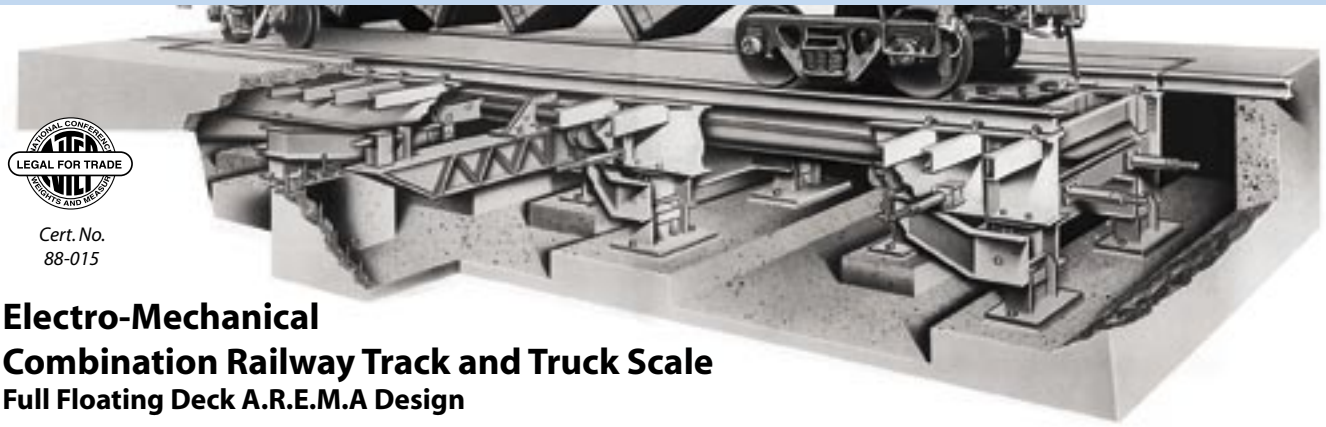
E-80 Cooper A.R.E.M.A Rating

Other sizes and capacities readily available. The above models are built to AAR/A.R.E.M.A. Handbook specifications.

Cert. No. 91-041

MEASUREMENT CANADA

Notice of Approval S.WA-4332



Cert. No. 88-015

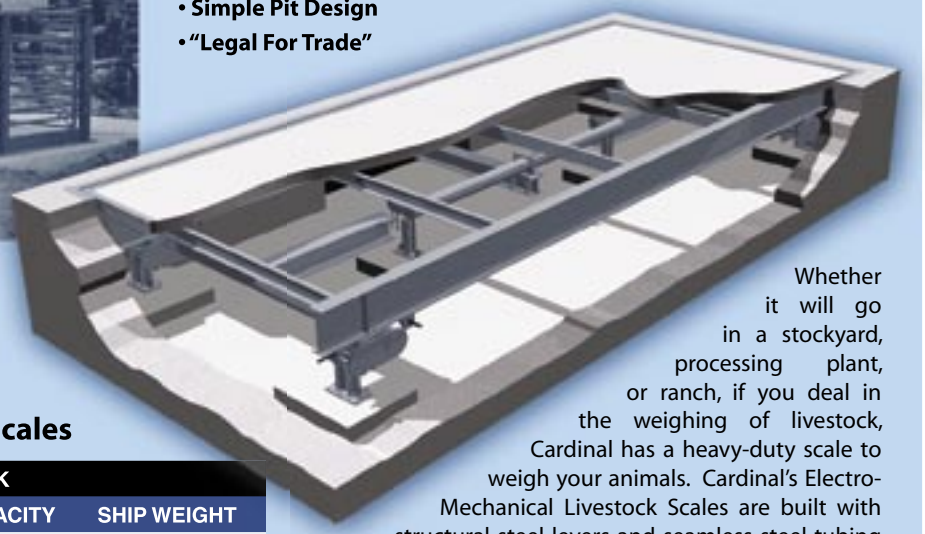
Electro-Mechanical Combination Railway Track and Truck Scale
Full Floating Deck A.R.E.M.A Design

The RSAL design is the first fabricated steel lever railway scale approved by the A.R.E.M.A. (American Railway Engineering Maintenance Association). It's also the first to adapt "A"-Frame Construction to increase strength and rigidity of high capacity scales. The cutaway illustration above shows the Cardinal "A"-frame lever construction, a variation of the basic torque lever design required in heavier capacity railway track scales. Both the standard torque lever design, which is used on some of the smaller capacity scales, and the "A"-frame design, provides load transmission on a true centerline to avoid any distortion of scale mechanism that could result in reading errors. Standard installation includes the lever system with digital indicator, and a steel weighbridge for concrete deck. E-80 Cooper A.R.E.M.A Rating.

MODEL	GROSS TON CAPACITY	PLATFORM SIZE	SECTION TON CAPACITY
6080-RSAL	250	60' x 10'	25" - 150
6680-RSAL	300	66' x 10'	25" - 150
7280-RSAL	300	72' x 10'	25" - 150

LIVESTOCK SCALES

- **Fewer Levers And Parts - Less Wear And Tear**
- **Double-Link Suspension Bearings**
- **Concrete or Wood Deck Models**
- **Simple Pit Design**
- **"Legal For Trade"**



Cert. No. 88-017

Electro-Mechanical Livestock Scales

CONCRETE DECK			
MODEL	PLATFORM SIZE	CAPACITY	SHIP WEIGHT
LS051208	12' x 8' (3.6 m x 2.4 m)	5 ton	1,349 lb / 611 kg
LS051408	14' x 8' (4.2 m x 2.4 m)	5 ton	1,460 lb / 622 kg
LS101609	16' x 9' (4.9 m x 2.7 m)	10 ton	2,273 lb / 1,031 kg
LS101809	18' x 9' (5.4 m x 2.7 m)	10 ton	2,839 lb / 1,287 kg
LS102209	22' x 9' (6.7 m x 2.7 m)	10 ton	3,017 lb / 1,368 kg
LS103014	30' x 14' (9.1 m x 4.2 m)	10 ton	6,250 lb / 2,835 kg
LS153014	30' x 14' (9.1 m x 4.2 m)	15 ton	6,236 lb / 2,828 kg
LS202614	26' x 14' (7.9 m x 4.2 m)	20 ton	5,997 lb / 2,720 kg

Add "W" suffix for each model number to specify WOOD DECK.

Whether it will go in a stockyard, processing plant, or ranch, if you deal in the weighing of livestock, Cardinal has a heavy-duty scale to weigh your animals. Cardinal's Electro-Mechanical Livestock Scales are built with structural steel levers and seamless steel tubing providing extra strength and less weight. Doublelink suspension bearings eliminate platform shock prolonging the life of the scale. Pivots are tempered high-grade tool steel and, along with self-aligning bearings, are supported throughout their entire length. Interchangeable parts and simple pit design make installation and maintenance quick and easy. Electro-mechanical livestock scales have the advantages from both electrical and mechanical scale systems combined. With the dependability of the lever system and one Cardinal strain gauge load cell, weight indication can be located away from the scale platform.

Livestock rack not included.

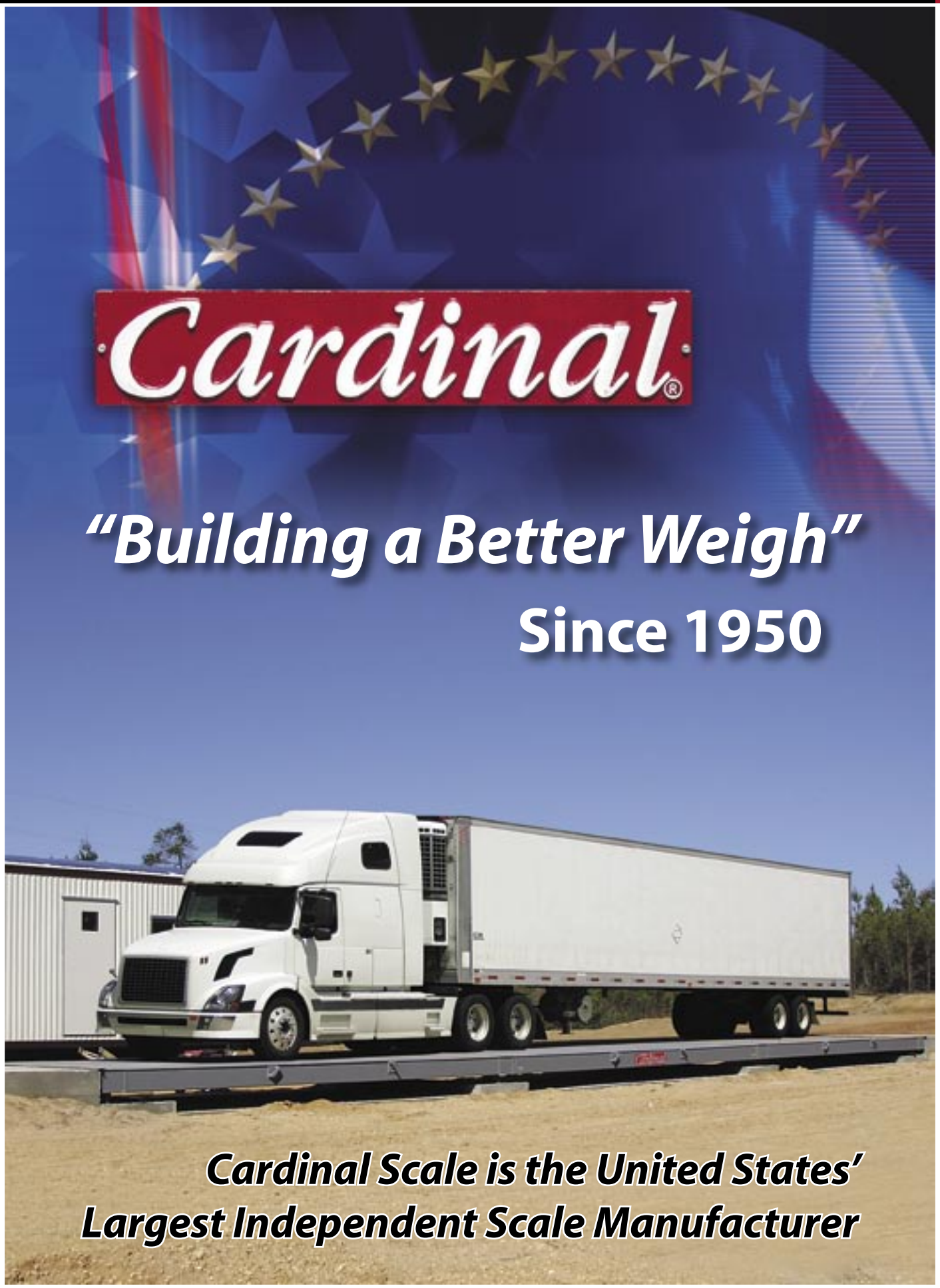
Cardinal's Fully Electronic Livestock Scales provide easy top plate access to the load cells and bumper bolts. The low profile design 10" high reduces foundation costs to a minimum. The LSE model features stainless steel beam load cells and concrete deck design.

- **Concrete Deck**
- **Easy To Install**
- **10" Height**

Cert. No. 97-043

Full Electronic Low-Profile Livestock Scales

CONCRETE DECK						
MODEL	PLATFORM SIZE	CAPACITY	SHIPPING WEIGHT	NUMBER OF SECTIONS	NUMBER OF MODULES	NUMBER OF LOAD CELLS
LSE818	18' x 10' (5.4 m x 3 m)	8 ton	3,153 lb / 1,430 kg	2	1	4
LSE820	20' x 10' (6 m x 3 m)	8 ton	3,500 lb / 1,587 kg	2	1	4
LSE1630	30' x 10' (9.1 m x 3 m)	16 ton	6,127 lb / 2,779 kg	3	2	6
LSE1635	35' x 10' (10.6 m x 3 m)	16 ton	7,148 lb / 3,242 kg	3	2	6


Cardinal
"Building a Better Weigh"
Since 1950
Cardinal Scale is the United States'
Largest Independent Scale Manufacturer

LIQUID FILLERS AND CONTROLLERS

MODEL 17S
Semi-Automatic, Subsurface Drum Filler

Semi-automatic machine for filling foaming materials in 30 and 55 gallon drums.

Fill Time: 60 seconds per 55 gallon drum (208L)
Scale Base: 30" x 30" (76 cm x 76 cm)
Product Delivery: 110 GPM at 20 PSIG min. with 2" NPT connection (416 liters per minute at 1.3 Bars)
Gross Capacity: 1,000 lb (500 kg)

(shown here with optional sanitary white paint and sanitary lance)

MODEL 23S
Semi-Automatic, Subsurface Pail Filler

Semi-automatic machine for filling foaming materials in 5 and 10 gallon drums.

Fill Time: 30 seconds per 5 gallon pail (18L)
Scale Base: 18" x 18" (46 cm x 46 cm)
Product Delivery: 110 GPM at 20 PSIG min. with 2" NPT connection (416 liters per minute at 1.3 Bars)
Indication: 200 lb (90 kg)

MODEL FWC-788
Drum Filler Controller

The FWC-788 Controller offers full electronic control for the standard Fuller filling units. The controller utilizes a Cardinal 788 instrument enclosed in a NEMA-4, painted enclosure with a pneumatic interface for operating the lance assemblies.

The FWC-788 offers multiple product filling for either foaming or non-foaming products with many features and safety interlocks included.

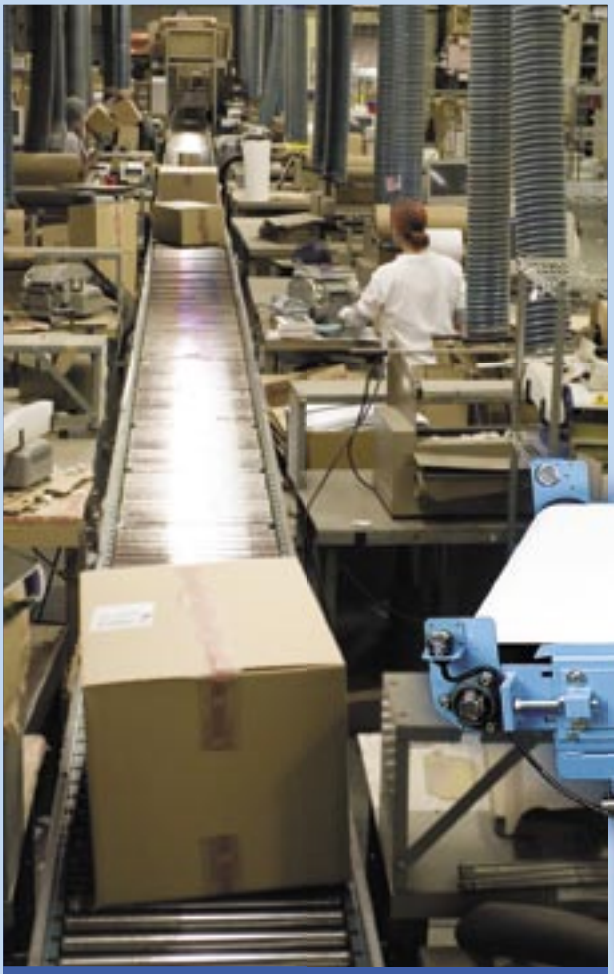
MODEL 27S
Semi-Automatic, Subsurface Palletized Drum Filler

The pneumatic-powered lance carriage with x-y movement can reach four drums or one tote. Lance movement is controlled via pneumatic push buttons on the operator panel.

Fill Time: 60 seconds per 55 gallon drum (208L)
Scale Base: 48" x 48" (122 cm x 122 cm)
Product Delivery: 110 GPM at 20 PSIG min. with 2" NPT connection (416 liters per minute at 1.3 Bars)
Gross Capacity: 5,000 lb (2,268 kg)

More than one incompatible product may be filled on the 27S filler by adding additional lances (up to a total of three lances).

Model 25S also available (not pictured)
Semi-Automatic, Subsurface Palletized Drum Filler
Semi-automatic filling of multiple containers or totes on a pallet.
Fill Time: 60 seconds per 55 gallon drum (208L)



MODELS CIM100/200

- **Control Your Bulk Packaging of Products**
- **Improve Productivity**
- **Reduce Labor**
- **Improve Throughput**
- **Enhance Quality Control**

Fuller Weighing Systems' CIM In-Motion Checkweigher keeps your production line humming to reduce labor costs while providing accurate weight of each package. Available in your choice of two capacities, the Fuller In-Motion Checkweigher blends seamlessly into your line for fast, efficient weighing. A number of options are available below to customize the CIM to fit your specific application, whether it's packages, parts, or food handling.

- **Available in 100 lb x 0.05 lb (45 kg x 0.02 kg) and 200 lb 0.1 lb (90 kg x 0.04 kg) capacities**
- **Up to 200 ft. (61m) per minute belt speed**
- **Weight or zone classification modes**
- **Package weights up to 200 lb / 90 kg**
- **Reject output for out-of-tolerance products**

Cardinal Model 220 Weight Indicator

12-digit,
14-segment,
0.8" (20mm) high backlit LCD

Controller Specifications

- NEMA 4X/IP66 stainless steel enclosure
- Sample rate: 1 to 100 samples per second, selectable
- Dual RS-232 ports
- Operating temperature: 10 to +40°C/+14 to 104°F
- Power: 110/230 VAC, 50 or 60 Hz
- Solid state control signals, 1 amp @ 120 VAC
- Enter and Exit photo eyes, presets, outputs for 3 weight zones, alarm and reject functions

Scale Conveyor Specifications

- Mild steel construction, epoxy paint
- Anti-static polyester fabric conveyor belt
- Dimensions: 48" L x 24" W x 32" H / 122 cm L x 61 cm W x 81 cm H
- Optional variable belt speed up to 200' (61m) per minute
- 1/2 Horsepower AC fixed speed motor requires 230/460 VAC 3 PH, 50/60 Hz
- Photo eyes require 115 VAC 60 Hz

Options:

- Food grade conveyor belt
- Stainless steel construction
- Custom conveyor sizes - consult factory
- Printer (records weight of each item, or prints summaries)
- Feed conveyor start-stop (for unevenly spaced items or those sent through at too great a speed)
- Five zone checking
- Product memory (store set points and accumulators by product name)
- Alarm (set to sound when the conveyor is empty for too long, over capacity, and other error conditions)
- Variable speed for belt speeds up to 200 feet (61 m) per minute
- Rejectors (take away arms to direct "off" weights to another area)
- Statistical software package

FLOOR STAND TANK & HOPPER SCALES

CUSTOM DESIGNED AND MANUFACTURED TO MEET ANY SPECIFICATIONS

Cardinal's Mechanical Floor Stand Tank and Hopper Scales can be supplied in a wide range of sizes and shapes to fit almost any individual tank or hopper (tanks and/or hoppers are generally furnished by the customer). The scales are designed so that the hopper or tank legs can be mounted directly on the scale girder chairs or on the fabricated steel weighbridge, whichever is preferred. The shallow construction of the Cardinal scale makes it ideal where minimum headroom is available. Complete blueprints are furnished on each installation to insure that the scales will fit the proposed tank or hopper.

INDUSTRIES:

- Feed Mills
- Wineries
- Fertilizer Plants
- Breweries
- Concrete Plants
- Mineral Plants
- Asphalt Plants
- Chemical Plants

Model FS-3F
(load cell not included)

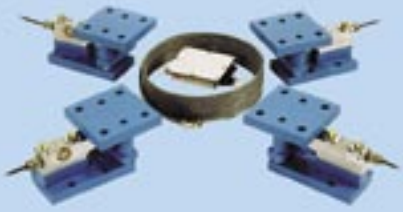
All Cardinal tank and hopper scales incorporate the link suspension bearing system. Link suspension bearings absorb impacts and provide a free-floating platform. The levers are constructed of structural steel shapes and extra heavy seamless steel tubing to give greater strength than much heavier materials of comparative low tensile strength.

Vertical Tank with Flat Bottom
The scale shown to the left is a flat-bottomed tank and side discharge. Main lever arms are connected under the tank area. Scales of this type are generally designed for use with light gauge flat bottomed tanks supported on timber or steel plate decks mounted on a steel weighbridge. However, if desired, scales may be designed to accomodate heavier gauge tanks without a steel weighbridge by mounting tank supports directly to scale girder chairs.

Horizontal Tank with End Discharge
The tank shown to the left is an example where the scale is mounted beneath the tank with an end discharge. Tank saddles are mounted directly to the scale girder chairs. If desired, tank saddles could be mounted to the scale weighbridge instead of directly to the scale.

Vertical Tanks with Cone Bottoms
The scales shown to the left are examples of vertical tanks or hoppers with center discharges. Levers are so arranged with a center hookup and transverse lever outside of the scales which leave a center opening to permit discharge. Support legs of the hoppers can be mounted directly to the scale girder chairs or, if desired, a steel weighbridge could be used under the hoppers.

Full Load Cell Systems Also Available. *Please see pages 66-67.*



IDEAL FOR:

- Inventory Control
- Weigh-in or Weigh-out Operations
- Blending or Proportioning of Any Liquid or Free-Flowing Material

LEGAL FOR TRADE

Cert. No. 88-011

MEASUREMENT CANADA

Notice of Approval AM-5277

For tank and hopper scales of more than 1,000 kg capacity and greater than 1.6 m square

Mechanical Systems Only Listed By Model Below

MODEL	CAPACITY	BASE	
		SPLICE ARM TOTAL	PIPE LENGTH
FS-1F	0 lb - 5,000 lb	3'	3'
FS-2F	5,001 lb - 7,000 lb	3'	3'
FS-2.5F	7,001 lb - 10,000 lb	4'	4'
FS-3F	10,001 lb - 20,000 lb	4'	4'
FS-4	20,001 lb - 30,000 lb	5'	5'
FS-5	30,001 lb - 50,000 lb	6'	6'
FS-6	50,001 lb - 60,000 lb	6'	6'
FS-7	60,001 lb - 80,000 lb	8'	8'
FS-8	80,001 lb - 100,000 lb	8'	8'
FS-9	100,001 lb - 150,000 lb	8'	8'
FS-10	150,001 lb - 200,000 lb	10'	10'
FS-11	200,001 lb - 300,000 lb	10'	10'

SUSPENSION HOPPER SCALES

Cardinal Suspension Hopper Scales may be used in fixed positions or can be installed on lorry cars or on a monorail system, whichever is best for your application. The torque levers are made of seamless steel tubing and hopper lugs and are built with such flexibility they can be installed on virtually any special equipment application required. Standard scale equipment furnished in addition to the lever system are the four suspension rods for the hanging the scale from overhead supports, and four suspension rods for supporting the hopper or tank. These are supplied in any length specified by the user. A sliding balance weight is furnished on overhead arm to compensate for variable dead loads, residue, etc., and a steelyard rod is furnished from the lever system to the weight indication unit.

Scales For Square, Round, or Rectangle Suspension Hoppers

MAXIMUM 2,000 DIVISIONS			BASE	
MODEL	CAPACITY	DIVISIONS	SPLICE ARM TOTAL	PIPE LENGTH
SH-1*	0 lb - 1,000 lb	1 lb	4'	4'
SH-2	1,001 lb - 5,000 lb	5 lb	6'	6'
SH-3	5,001 lb - 9,000 lb	10 lb	7'	7'
SH-3.5	9,001 lb - 14,000 lb	10 lb	7'	7'
SH-4	14,001 lb - 23,000 lb	20 lb	7'	6'
SH-5	23,001 lb - 30,000 lb	20 lb	7'	6'
SH-6	30,001 lb - 40,000 lb	20 lb	8'	6'
SH-7	40,001 lb - 60,000 lb	50 lb	8'	6'
SH-8	60,001 lb - 100,000 lb	100 lb	8'	8'

** All scales of this model require graduations of less than 1/2 lb and require a "HI-ACC" system, which is not "Legal-for-Trade."*

Full Load Cell Systems Also Available. *Please see page 66.*

IDEAL FOR:

- Batching
- Charging
- Proportioning
- Filling
- Compounding and Processing

LEGAL FOR TRADE

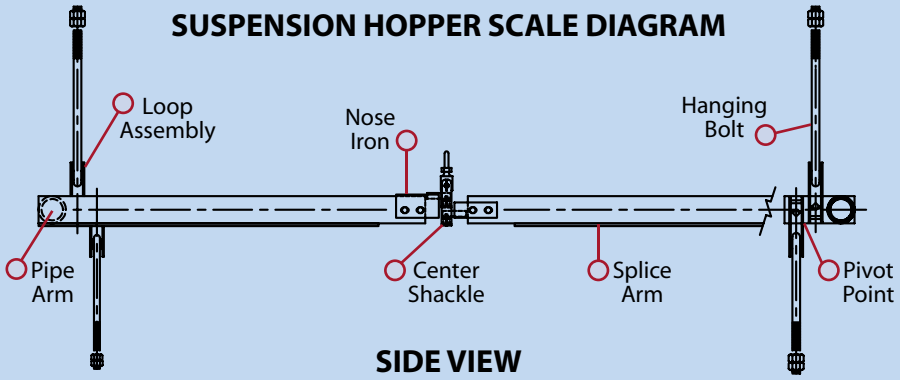
Cert. No. 88-016

Weighing Capacity: Models listed above show net weighing capacity. A dead load not to exceed 25% has been allowed for the hopper weight. If the dead load exceeds 25%, a larger capacity lever must be used.
Splice and Pipe Length: To determine the correct length of the splice, pipe and arms, the following rules will apply:

1.) The total splice arm length will be the same as the dimension of the hopper side it parallels. The pipe length will be the same as the hopper side it parallels.
2.) The total splice arm length and the pipe length will be equal to the diameter of the hopper.

When giving the hopper dimension, the splice arm length should be given first, then followed by the length of the pipe lever.
Extension Levers: Scales are furnished with extension levers up to 6' in length. Cardinal can provide additional distance, if needed.
Suspension Rods: Four suspension rods for supporting the levers and four rods for supporting the hopper are standard.

SUSPENSION HOPPER SCALE DIAGRAM



SIDE VIEW

FLOOR SCALES

RuggedWeigh Economical Floor Scales

MODEL	PLATFORM SIZE	APPROX SHIP WT
Capacity: 5,000 lb x 1 lb (2,268 kg x 0.5 kg)		
FH-533-F	3' x 3' (0.9 m x 0.9 m)	146 lb / 66 kg
FH-544-F	4' x 4' (1.2 m x 1.2 m)	277 lb / 126 kg
FH-555-F	5' x 5' (1.5 m x 1.5 m)	404 lb / 183 kg

Model FH-544-F

Sturdy underdeck protection

Heavy-Duty Frameless Floor Huggers

MODEL	PLATFORM SIZE	APPROX SHIP WT
Capacity: 1,000 lb x 0.2 lb (454 kg x 0.09 kg)		
FH-133-II	3' x 3' (0.9 m x 0.9 m)	165 lb / 75 kg
FH-144-II	4' x 4' (1.2 m x 1.2 m)	240 lb / 109 kg
FH-155-II	5' x 5' (1.5 m x 1.5 m)	330 lb / 150 kg
Capacity: 2,000 lb x 0.5 lb (907 kg x 0.2 kg)		
FH-233-II	3' x 3' (0.9 m x 0.9 m)	165 lb / 75 kg
FH-244-II	4' x 4' (1.2 m x 1.2 m)	240 lb / 109 kg
FH-255-II	5' x 5' (1.5 m x 1.5 m)	330 lb / 150 kg

MEASUREMENT CANADA

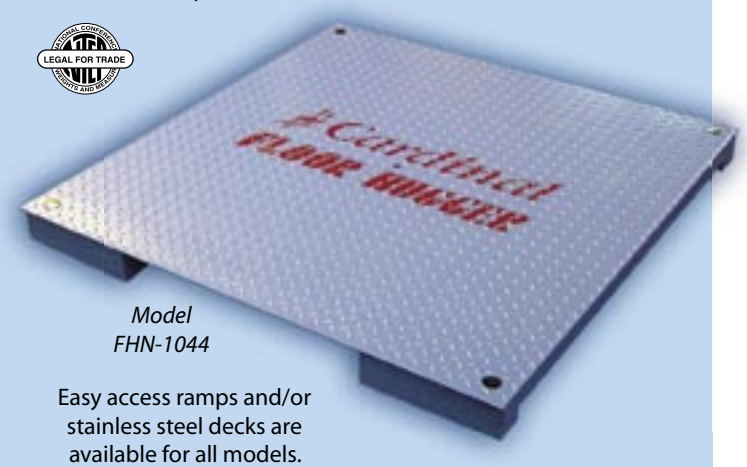
Notice of Approval AM-4592

Model FH-255-II shown with optional access ramps

Extra Heavy-Duty Frameless Floor Huggers

MODEL	PLATFORM SIZE	APPROX SHIP WT
Capacity: 5,000 lb x 1 lb (2,268 kg x 0.5 kg) *NTEP Certificate of Conformance No. 96-113*		
FHN-533	3' x 3' (0.9 m x 0.9 m)	467 lb / 211 kg
FHN-544	4' x 4' (1.2 m x 1.2 m)	521 lb / 237 kg
FHN-554	5' x 4' (1.5 m x 1.2 m)	610 lb / 277 kg
FHN-555	5' x 5' (1.5 m x 1.5 m)	701 lb / 318 kg
FHN-564	6' x 4' (1.8 m x 1.2 m)	745 lb / 338 kg
FHN-575	7' x 5' (2.1 m x 1.5 m)	940 lb / 426 kg
Capacity: 10,000 lb x 2 lb (4,536 kg x 0.9 kg) *NTEP Certificate of Conformance No. 96-113*		
FHN-1044	4' x 4' (1.2 m x 1.2 m)	521 lb / 237 kg
FHN-1054	5' x 4' (1.5 m x 1.2 m)	610 lb / 277 kg
FHN-1055	5' x 5' (1.5 m x 1.5 m)	701 lb / 318 kg
FHN-1064	6' x 4' (1.8 m x 1.2 m)	745 lb / 338 kg
FHN-1075	7' x 5' (2.1 m x 1.5 m)	940 lb / 426 kg

These robust scales are designed for long-term service and accuracy even in the most severe installations.



Model FHN-1044

Easy access ramps and/or stainless steel decks are available for all models.

Floor Hugger With Integral Ramp

MODEL	PLATFORM SIZE	APPROX SHIP WT
Capacity: 5,000 lb x 1 lb (2,268 kg x 0.5 kg)		
RFH-544	5' x 5' (1.5 m x 1.5 m) Flat platform area: 48" x 40" (122 cm x 102 cm)	595 lb / 270 kg

Model RFH-544

Lift-Up Top Stainless Steel Floor Huggers

MODEL	PLATFORM SIZE	APPROX SHIP WT
Capacity: 5,000 lb x 1 lb (2,268 kg x 0.5 kg)		
FHLT-544	4' x 4' (1.2 m x 1.2 m)	559 lb / 254 kg
FHLT-555	5' x 5' (1.5 m x 1.5 m)	709 lb / 322 kg
Capacity: 10,000 lb x 2 lb (4,536 kg x 0.9 kg)		
FHLT-1044	4' x 4' (1.2 m x 1.2 m)	559 lb / 254 kg
FHLT-1055	5' x 5' (1.5 m x 1.5 m)	709 lb / 322 kg

The lift-up top design with stainless steel gas spring shocks allows for easy lifting of the heavy-duty deck for washdowns.

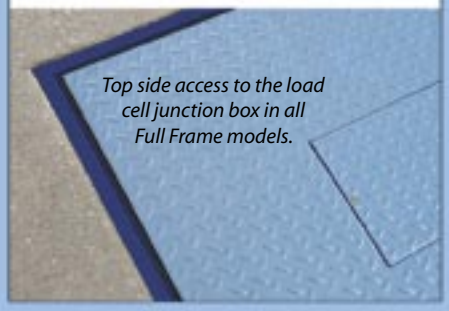
Model FHLT-1044

FLOOR SCALES

ELECTRONIC LOW-PROFILE PLATFORM SCALES

Pit Type Applications

The Cardinal Full Frame Floor Scale is the perfect choice for pit type applications where you need the scale flush with your floor surface (shown below). The lower frame design allows you to lower the scale into a preformed pit with minimal construction required.



Top side access to the load cell junction box in all Full Frame models.

Stainless Steel

All Cardinal Floor Hugger models* are also available in stainless steel, ideal for washdown applications.

* except for model RFH-544

Optional Access Ramps

Checkered deck acess ramps are available for all Floor Hugger models.

Extra Heavy-Duty Lower Frame Floor Huggers

MODEL	PLATFORM SIZE	APPROX SHIP WT
Capacity: 5,000 lb x 1 lb (2,268 kg x 0.5 kg) *NTEP Cert. of Con. No. 90-069A2 Canadian Notice of App. AM-4592*		
FH-544-II	4' x 4' (1.2 m x 1.2 m)	521 lb / 237 kg
FH-555-II	5' x 5' (1.5 m x 1.5 m)	701 lb / 318 kg
Capacity: 10,000 lb x 2 lb (4,536 kg x 0.9 kg) *NTEP Cert. of Con. No. 90-069A2 Canadian Notice of App. AM-4592*		
FH-1044-II	4' x 4' (1.2 m x 1.2 m)	521 lb / 237 kg
FH-1055-II	5' x 5' (1.5 m x 1.5 m)	701 lb / 318 kg
Capacity: 20,000 lb x 5 lb (9,071 kg x 2.3 kg) *NTEP Cert. of Con. No. 90-069A2 Canadian Notice of App. AM-4592**		
FH-2055-II*	5' x 5' (1.5 m x 1.5 m)	975 lb / 442 kg
FH-2064-II*	6' x 4' (1.8 m x 0.9 m)	950 lb / 431 kg
FH-2075-II*	7' x 5' (2.1 m x 1.5 m)	1,290 lb / 585 kg
FH-2086-II	8' x 6' (2.4 m x 1.8 m)	1,675 lb / 760 kg
FH-2097-II	9' x 7' (2.7 m x 2.1 m)	2,010 lb / 912 kg
FH-201210-II	12' x 10' (3.7 m x 3 m)	4,287 lb / 1,944 kg

Model FH-544-II with optional access ramps

- **Low Profile**
- **Four-Way Approach**
- **Custom Platform Sizes Available**
- **Capacities up to 20,000 lb (9,071 kg)**
- **Well-Protected Stainless Steel Load Cells**

Cardinal's Floor Hugger above-ground or pit installation platform scales provide the latest in weighing technology. Cardinal's unique load cell assemblies are self-checking, incredibly well-protected, and environmentally sealed for those less-than-perfect locations.Other design features include a rigidly constructed weighbridge with optional easy-to-remove ramps. When necessary, the entire scale can be conveniently lifted, moved, and re-installed as your production and traffic flow needs change.

Integral Ramps ***Lift-Up Tops*** ***Stainless Steel*** ***Lower Frame*** ***Frameless*** ***Economical***

GENERAL PURPOSE FLOOR SCALES

Run-a-Weigh Portable Floor Scales

Weighing in at less than 100 pounds (45 kg) and featuring built-in handles and wheels, the Run-a-Weigh is easy to lift and roll to wherever you need it. Whether it's multiple weighing locations at a single facility or the need to take a scale to special job sites, the Run-a-Weigh gives you true portability. This portable scale features a Cardinal digital weight indicator which can be mounted on the wall or desk for convenient viewing. Setup is simple and quick with the Run-a-Weigh's self-aligning feet. Heavy-duty construction, stainless steel load cells, large checkered safety platform with integral ramps, and the 500 or 1,000 lb (225 or 450 kg) capacity make this the perfect scale for weighing barrels, drums, and small crates - anywhere!

MODEL	CAPACITY	MATERIAL
RW-1000	1,000 lb x 0.5 lb / 450 kg x 0.2 kg	mild steel
RW-1000S	1,000 lb x 0.5 lb / 450 kg x 0.2 kg	stainless steel
RW-500	500 lb x 0.2 lb / 225 kg x 0.1 kg	mild steel

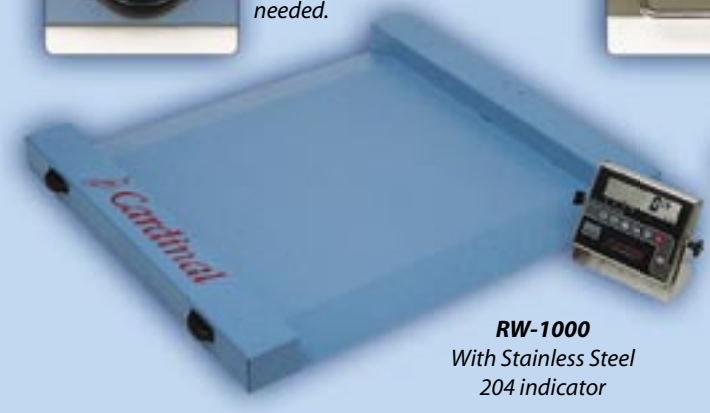
Model RW-500

Platform Size: 32.5"W x 30"D x 1.625"H / 83 cm W x 76 cm D x 4 cm H
Overall Size: 32.5"W x 40.5"D x 3.5"H / 83 cm W x 103 cm D x 9 cm H
Power:
204 - 6 "C" cell or NiCad batteries, standard 12VDC (115 VAC 60 Hz adapter) or 115 VAC 60 Hz
205 - 90 to 260 VAC, 50 or 60 Hz
Shipping Weight: 105 lb / 48 kg

Available in your choice of mild or stainless steel

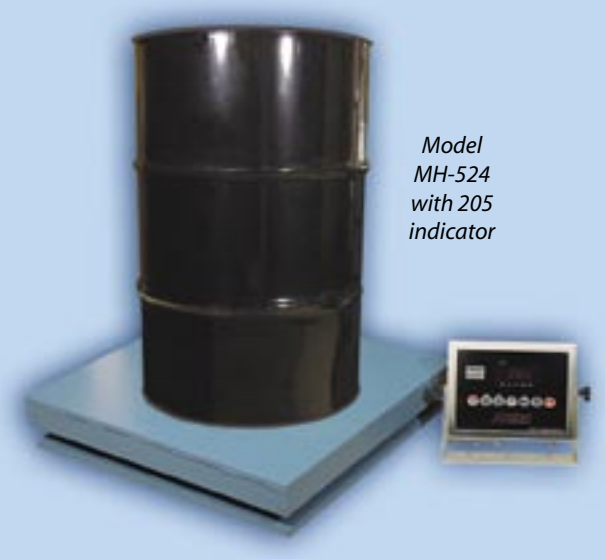
Built-in Wheels
Permits the scale to be rolled anywhere it's needed.

Integral Handles
Makes it easy to lift and lower the scale into position.



RW-1000
With Stainless Steel 204 indicator

RW-1000S
NEMA 4X/IP66 Stainless Steel 205 indicator



Model MH-524 with 205 indicator

Mini Hugger Stationary Floor Scales

Great for industrial applications, Cardinal's Mini Hugger low-profile drum scale is rugged enough for everyday use in the busiest of warehouses. Cardinal's heavy-duty CHB single point load cell and 0.5" (13 mm) thick steel deck plate mean low maintenance and high performance. The load cell cable length is 10 feet (3 m) long. Add a Cardinal 200 series indicator (205 shown) and you'll have a weighing system to get the job done accurately and reliably (weight indicator is not included) The platform height is 6" (152 mm) maximum, and the MH-524 features four adjustable mounting feet 2" (51 mm) in diameter.

MODEL	CAPACITY	MATERIAL
MH-524	500 lb x 0.2 lb / 227 kg x 0.09 kg	mild steel

Platform Size: 24"W x 24"D x 6"H / 61 cm W x 61 cm D x 15 cm H
Shipping Weight: 225 lb / 102 kg

Model CS-30

MODEL	CAPACITY
CS-6	6 lb x 0.0005 lb / 3 kg x 0.2 g
CS-15	15 lb x 0.001 lb / 7.5 kg x 0.5 g
CS-30	30 lb x 0.002 lb / 15 kg x 1 g
CS-65	65 lb x 0.005 lb / 30 kg x 2 g

Platform Size: 11.38"W x 8.25"D / 29 cm W x 21 cm D
Overall Size: 11.75"W x 12.63"D x 4.25"H / 30 cm W x 32 cm D x 11 cm H
Display: 0.75" (19mm) high LCD with backlight
Internal Resolution: 1 part in 300,000
Power: Rechargeable battery pack or 115 VAC 50/60Hz or 230 VAC 50/60Hz
Shipping Weight: 13 lb / 6 kg

CS Series Counting Scales

Take the guess work out of counting with Cardinal's CS series counting scales. Designed for portable use with a built-in rechargeable battery pack, the CS series is ideal for inventory when mobility is a must. This scale is ideal for multiple operators with its easy-to-use keypad.

- Rechargeable battery pack (up to 200 hours of continuous use).
- Sleep mode for extended battery life.
- Vinyl dust and debris cover protects the scale from accumulation over long term use.
- Memory key to accumulate total piece count and weight Preset feature for setting weight and quantity limits.
- With 15,000 weight divisions, the CS series is capable of counting the smallest of parts.

The LCD is backlit to provide easy viewing of weight, average piece weight, and count. The color-coded keypad insures simple and accurate operation.

Model 2240-20

MODEL	CAPACITY
2240-5	5 lb x 0.0005 lb / 2 kg x 0.0002 kg
2240-10	10 lb x 0.001 lb / 4.54 kg x 0.005 kg
2240-20	20 lb x 0.002 lb / 10 kg x 0.001 kg
2240-50	50 lb x 0.005 lb / 20 kg x 0.002 kg
2240-100	100 lb x 0.01 lb / 45.4 kg x 0.005 kg

Platform Size: 14.5"W x 8.25"D / 37 cm W x 21 cm D
Overall Size: 14.5"W x 12"D x 4"H / 37 cm W x 30 cm D x 10 cm H
Display: 0.5" (13mm) high LED
Internal Resolution: 1 part in 1,000,000
Power: 90/230 VAC, 50/60 Hz
Shipping Weight: 21 lb / 10 kg

2240 Series Counting Scales

A second scale input allows the 2240 to be connected to a remote scale, which can be used as either the sampling scale, the bulk scale, or both. The 2240 retains the last average piece weight and automatically re-calculates the average piece weight when the sample size is changed. It stores up to 300 ID numbers, each with its own tare weight, average piece weight, and accumulator. The 2240 features dual displays for count and weight and QuickCount keys for simplified operation.

The optional battery is readily available, easily replaced, and provides up to 9 hours of operation. The battery monitor signals when it's time to recharge. Just plug in the power cord and the 2240 does the rest.

Optional P220 Label Printer prints ID number, count, time, date, gross, tare, net weight and units.

PORTABLE ALL-PURPOSE SCALES

Model MD250

MD Series Portable Scales

With Built-in Carrying Handle

The size of a small briefcase and incredibly compact and light, the MD series portable scales are built with sturdy steel construction for durability. Featuring a 250 lb capacity by 1 pound graduations and with a built-in carrying handle, the MD series scales are easy to transport. They feature an easy-to-read dial with shatterproof lens, and the Lock/Hold feature is useful for oversize loads.

MODEL	CAPACITY	UPC CODE
MD250	250 lb x 1 lb	809161136500

Platform Dimensions: 13"W x 10.5"D / 33 cm W x 27 cm D
Shipping Weight: 11 lb / 5 kg

Model DR400

DR Series Low-Profile Platform Scales

Accurate and reliable, Detecto's economical general purpose DR150 and DR400 platform scales quickly pay for themselves when used for receiving goods by weight. The remote indicator easily mounts on a table or wall and features a large 1"/25 mm display, units conversion, and tare. Battery powered, these scales are portable so you can have a scale anywhere you need it. Features RS-232 serial output.

MODEL	CAPACITY	UPC CODE
DR150	150 lb x 0.2 lb / 68 kg x 0.1 kg	809161130003
DR400	400 lb x 0.5 lb / 181 kg x 0.2 kg	809161130102
DR400CASE	Carrying case	809161136609

Platform Dimensions: 12"W x 12"D / 31 cm x 31 cm
Display: 4 digit, 7 segment, liquid crystal display, 1" / 25 mm high
Power: 9 volts DC supplied by 6 "AA" alkaline batteries (not included) or 115 volt AC adapter (included)
Shipping Weight: 13 lb / 6 kg

Optional black carrying case with handle protects the scale for easy transport.

LEGAL FOR TRADE

Cert. of Conform. No. 204 indicator: 02-016 GP-400 base: 94-098

GP Series Digital Low-Profile Scales

With Built-in Carrying Handle

Uses for this "legal-for-trade" lightweight portable scale are almost limitless. With a convenient, built-in carrying handle, it goes with you anywhere. The large 18" x 14" (46 cm x 36 cm) platform has a slip-proof mat and non-skid plastic feet for stability. The 204 model runs on AC power, Alkaline batteries, or rechargeable Ni-Cad batteries and features a bi-directional serial port, 1" high LCD display, and auto shutoff and sleep mode. The 205 model runs on AC power and features a bi-directional serial port, 0.6" high LED display, auto shutoff and sleep mode, accumulator, gross, and net, pushbutton tare, and adjustable filtering.

MODEL	CAPACITY	DISPLAY
GP-400-204	400 lb x 0.2 lb / 180 kg x 0.1 kg	LCD
GP-400-205	400 lb x 0.2 lb / 180 kg x 0.1 kg	LED

Platform Dimensions: 18"W x 14"D x 2"H / 46 cm W x 36 cm D x 5 cm H
Display: GP-400-204 - 1" / 25 mm high, 6-digit, 7-segment LCD
GP-400-205 - 0.6" / 14 mm high 6-digit, 7-segment LED
Power: GP-400-204 - 115 VAC 60 Hz adapter, or 230 VAC 50/60 Hz, or 6 "C" cell alkaline or rechargeable Ni-Cad batteries
GP-400-205 - 90 to 260 VAC, 50 or 60 Hz
Shipping Weight: 19 lb / 9 kg

LEGAL FOR TRADE

Cert. of Conform. No. 205 indicator: 01-011 GP-400 base: 94-098

Portable Digital Platform Scales

Detecto receiving scales protect your profits and actually "pay for themselves" by accurately weighing commodities coming in your door. Constructed entirely of heavy-duty welded fabricated steel bases and electrostatically coated with long-life paint, these "legal-for-trade" platform scales provide fast, portable, accurate performances that let the weighing come to where you need it. Large 5" (127mm) diameter heavy-duty rubolene wheels make the scales easy-to-roll wherever they are needed and battery operation adds to their portability.

Choose from two different digital weight indicators to suit your specific need. The model 215 has most of the features of the 204, but also includes keypad tare and various other features. For 200 series weight indicator features, please see the inside front cover comparison chart.

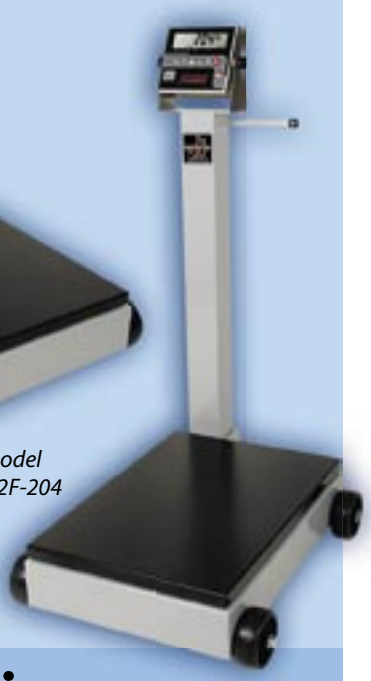
MODEL	CAPACITY	UPC CODE
5852F-204	500 lb x 0.2 lb / 220 kg x 0.1 kg	809161123005
5852F-215	Same	809161132106
8852F-204	1000 lb x 0.5 lb / 440 kg x 0.2 kg	809161123104
8852F-215	Same	809161132205

Platform Dimensions: 19"W x 28"D / 48 cm W x 71 cm D
Power: 204 - 6 "C" size Alkaline batteries (not included). Optional AC power adapter available.
215 - 10 "AA" size NiMH, 2300mAh batteries (not included) or 90 to 264 VAC, 50 or 60 Hz.
Shipping Weight: 108 lb / 49 kg

MEASUREMENT CANADA
Notice of Approval S.WA-4233 (5852F only)

LEGAL FOR TRADE
Cert. No. 88-106A1

Model 5852F-215



Model 5852F-204

REQUIRES ASSEMBLY

Assuring Accuracy In Your Weighing While Providing Long-Lasting Endurance

Digital Bench Scale

Cardinal's Model 7045G digital bench scale, built to withstand rugged industrial environments, is perfect for inventory purposes, weighing bulk commodities or shipping and receiving departments. The 7045G's model 204 digital indicator with 0.7"/18mm LCD display can be swiveled on its column so the user may turn it sideways for the best visibility. The base is 10.5" W x 14.5" D with a fixed auxiliary oversized galvanized platform which measures 18" W x 18" D with 4" upturned lip on back only.

Choose from pounds or kilograms readout with the switch selectable display that also features pushbutton tare. Long-life alkaline batteries add to this scale's portability while the oven-baked enamel finish remains marresistant after years of rugged use. The galvanized L-shaped pan gives you a larger weighing surface without taking up as much counter space for the base. For 204 digital weight indicator features, please see page 8 of this catalog or the inside front cover comparison chart.

MODEL	CAPACITY	UPC CODE
7045G	400 lb x 0.2 lb / 180 kg x 0.1 kg	809161116205

Platform Dimensions: 10.5"W x 14.5"D (27 cm W x 37 cm D) with a fixed auxiliary oversized platform, 18"W x 18"D with 4" (46 cm W x 46 cm D x 10 cm H) upturned lip on back only.
Power: 6 "C" size Alkaline batteries (not included). Optional AC power adapter available.
Shipping Weight: 42 lb / 19 kg

REQUIRES ASSEMBLY

Model 7045G

MECHANICAL BENCH SCALES

Model 1105DG

Optional adjustable wheeled stand

MEASUREMENT CANADA

Notice of Approval S.WA-380 Rev. 1

LEGAL FOR TRADE

Cert. No. 89-032A2

Bench Dial Scales

The 1100 series offers high accuracy and sturdy construction with minimum scale maintenance, due in part to the standard thermal elastic temperature-compensating springs and oil dashpot which add long-term accuracy.

MODEL	CAPACITY	UPC CODE
1100DB	50 lb x 1 oz	809161114706
1102DE	100 lb x 2 oz	809161114805
1102EDX	100 lb x 0.1 lb	809161114904
1105DG	200 lb x 4 oz	809161115000
1106DK	300 lb x 8 oz	809161115109
1100DBK	25 kg x 25 g	809161115208
1102EDK	50 kg x 50 g	809161115307
1106DKK	150 kg x 250 g	809161115406
	ACCESSORIES	
259R922	"L" shaped stainless steel pan 18" W x 18" D x 4" H / 46 cm W x 46 cm D x 10 cm H	809161115505
948GR933	Adjustable wheeled stand	809161115604

Lb/kg models also available - please consult factory
Dial: 15"/38 cm single dial, covered with glass
Platform Dimensions: 14" W x 18" D / 36 cm W x 46 cm D
Shipping Weight: 150 lb / 68 kg

Model 4420

REQUIRES ASSEMBLY

LEGAL FOR TRADE

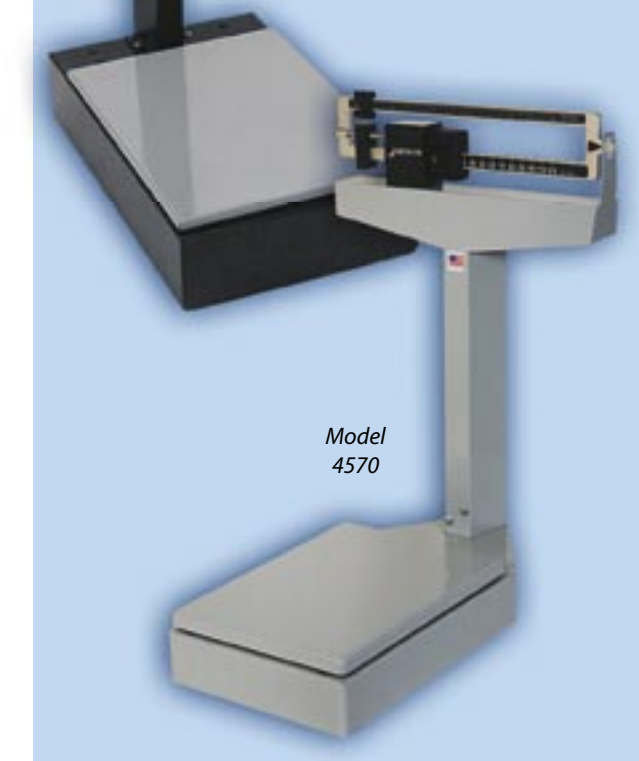
Cert. No. 91-162

"Legal for Trade" Bench Beam Scale

The scale's accuracy is further enhanced by its precision die-cast weighbeam which is easily read from both sides. Special tip locks and checks prevent the platform from tipping, protecting pivots and bearings.

MODEL	CAPACITY	UPC CODE
4420	350 lb x 4 oz	809161115703
4420KG	140 kg x 100 g (this model not "legal-for-trade"	809161115802
	ACCESSORY	
259R922	"L" shaped stainless steel pan 18" W x 18" D x 4" H / 46 cm W x 46 cm D x 10 cm H	809161115505

Overall Height: 29.625" / 75 cm
Platform Dimensions: 14" W x 19" D / 36 cm W x 48 cm D
Shipping Weight: 49 lb / 22 kg



Model 4570

Beam Type Bench Scales

MODEL *(UPC CODE)*	CAPACITY	UPPER BEAM	LOWER BEAM
4570 *809161115901*	130 lb	10 lb x 1 oz	120 lb x 10 lb
4520 *809161116007*	350 lb	50 lb x .25 lb	300 lb x 50 lb
4527PK *809161116116*	350 lb / 160 kg	50 lb x .25 lb / 20 kg x 100 g	300 lb x 50 lb / 140 kg x 20 kg

Overall Height: 27" / 69 cm
Platform Dimensions: 10.5" W x 14.5" D / 27 cm W x 37 cm D
Shipping Weight: 46 lb / 21 kg

General Utility Dial Scales

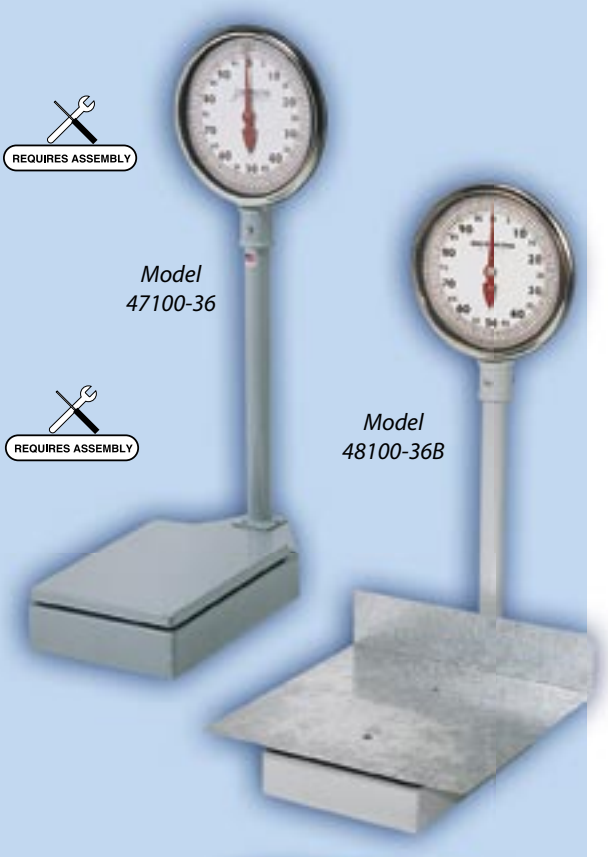
MODEL	CAPACITY	UPC CODE
47100-36	100 lb x 8 oz	809161112801
47200-36	200 lb x 1 lb	809161112900
47300-36	300 lb x 1 lb	809161113006

Specialty Dial Counter Scales

MODEL	CAPACITY / DESCRIPTION	UPC CODE
4860-36B	60 lb x 2 oz (double lip pan)	809161113204
48100-36	100 lb x 8 oz (single lip pan)	809161113105
48100-36B	100 lb x 8 oz (single lip pan)	809161113303
	ACCESSORIES	
5M35	Galvanized double lip pan 18" x 18" with 7" and 5" lip (46 cm x 46 cm x 18 cm x 10 cm)	809161113402
5M36 (Bananas)	Galvanized single lip pan 18" W x 18" D with 4" lip (46 cm x 46 cm x 10 cm)	809161113501

Dial: 10" / 25 cm single dial - covered with glass in painted sashes
Overall Height: 36" / 91 cm
Platform Dimensions: 10.5" W x 14.5" D / 27 cm W x 37 cm D
Shipping Weight: 54 lb / 24 kg

REQUIRES ASSEMBLY



Model 47100-36

REQUIRES ASSEMBLY

Model 48100-36B

Portable Mechanical Platform Scales with Beam

MODEL *(UPC CODE)*	CAPACITY	FRONT OF BEAM	BACK OF BEAM
854F100P *809161114201*	1,000 lb	100 lb x 0.5 lb	100 lb x 0.5 lb
854F50P *809161114300*	500 lb	50 lb x 0.25 lb	50 lb x 0.25 lb
854F50K *809161114409*	500 kg	50 kg x 0.25 kg	50 kg x 0.25 kg
854F50PK *809161114508*	500 lb / 200 kg	20 kg x 100 g	50 lb x 0.25 lb
854F100PK *809161114607*	1,000 lb / 500 kg	50 kg x 0.25 kg	100 lb x 0.5 lb

Overall Dimensions: 24" W x 35" D x 45" H / 61 cm W x 89 cm D x 114 cm H
Platform Dimensions: 19" W x 28" D / 48 cm W x 71 cm D
Wheels: Large 5"/13 cm diameter heavy duty rubolene wheels
Shipping Weight: 132 lb / 60 kg

LEGAL FOR TRADE

Cert. No. 88-106A1

MEASUREMENT CANADA

Notice of Approval S.WA-4097

REQUIRES ASSEMBLY

Model 854F100P

Model 954F100P

REQUIRES ASSEMBLY

Portable Mechanical Platform Scales with Beam

MODEL	CAPACITY	GRADS/BEAM	UPC CODE
954F100P	2000 lb	100 lb x 0.5 lb	809161114003
954F50K	1000 kg	50 kg x 0.25 kg	809161114102

Overall Dimensions: 33" W x 35" D x 45" H / 84 cm W x 89 cm D x 114 cm H
Platform Dimensions: 28" W x 28" D / 71 cm W x 71 cm D
Shipping Weight: 206 lb / 93 kg

MEASUREMENT CANADA

Notice of Approval S.WA-4097

LEGAL FOR TRADE

Cert. No. 88-108A1

STAINLESS STEEL BENCH SCALES

Cert. No.
03-031A1

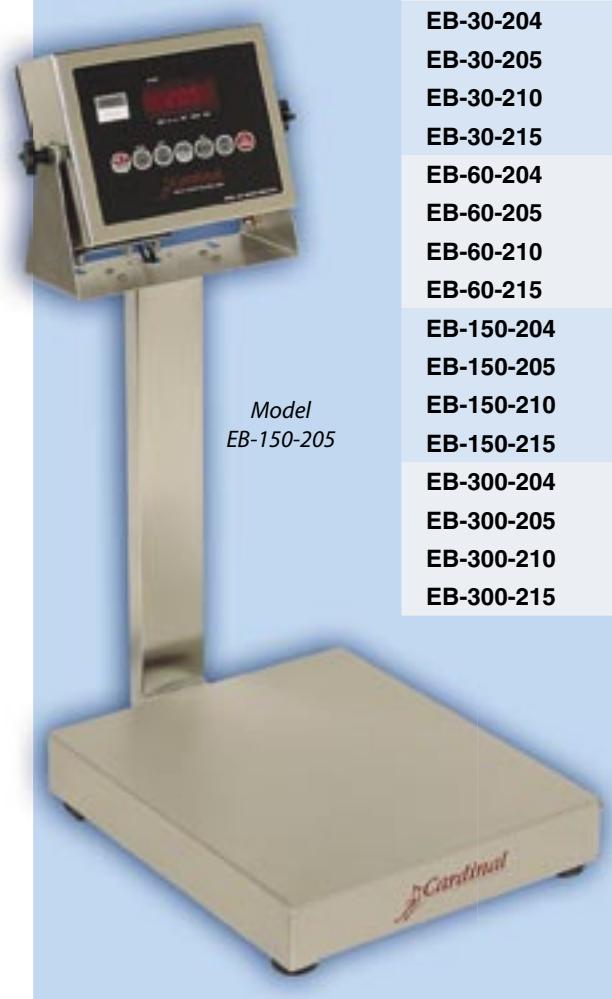
MEASUREMENT CANADA

Notice of Approval
AM-5526

EB Series Stainless Steel Bench Scales

The EB Bench Scales are designed for top performance and long-term accuracy. For weight indicator differences, please see pages 3-4 for a 200 series weight display breakdown chart.

MODEL	CAPACITY	PLATFORM SIZE	SHIPPING WEIGHT	UPC CODE
EB-15-204	15 lb x 0.005 lb / 6 kg x 0.002 kg	10" W x 12" D / 25 cm W x 30 cm D	28 lb / 13 kg	809161123609
EB-15-205			30 lb / 14 kg	809161124101
EB-15-210			30 lb / 14 kg	809161124606
EB-15-215			30 lb / 14 kg	809161137903
EB-30-204	30 lb x 0.01 lb / 15 kg x 0.005 kg	10" W x 12" D / 25 cm W x 30 cm D	28 lb / 13 kg	809161123708
EB-30-205			30 lb / 14 kg	809161124200
EB-30-210			30 lb / 14 kg	809161124705
EB-30-215			30 lb / 14 kg	809161138009
EB-60-204	60 lb x 0.02 lb / 30 kg x 0.01 kg	14" W x 16" D / 35 cm W x 40 cm D	43 lb / 20 kg	809161123807
EB-60-205			45 lb / 20 kg	809161124309
EB-60-210			45 lb / 20 kg	809161124804
EB-60-215			45 lb / 20 kg	809161138108
EB-150-204	150 lb x 0.05 lb / 60 kg x 0.02 kg	14" W x 16" D / 35 cm W x 40 cm D	43 lb / 20 kg	809161123906
EB-150-205			45 lb / 20 kg	809161124408
EB-150-210			45 lb / 20 kg	809161124903
EB-150-215			45 lb / 20 kg	809161138207
EB-300-204	300 lb x 0.1 lb / 150kg x 0.05 kg	20" W x 24" D / 50 cm W x 60 cm D	77 lb / 35 kg	809161124002
EB-300-205			79 lb / 36 kg	809161124507
EB-300-210			79 lb / 36 kg	809161125009
EB-300-215			79 lb / 36 kg	809161138306



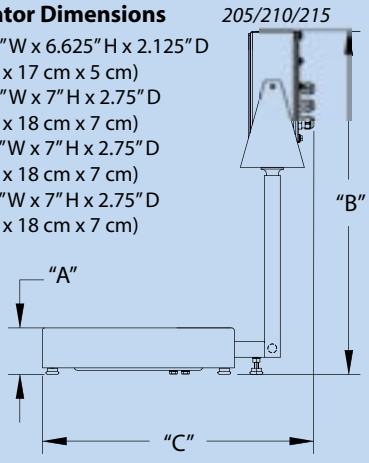
Model EB-150-205

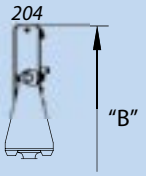
Model EB-150-LPAN

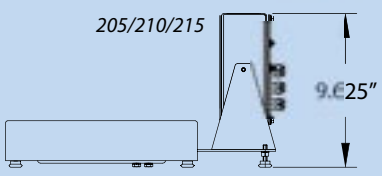
Model 210

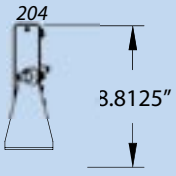
Indicator Dimensions

204: 8"W x 6.625"H x 2.125"D (20 cm x 17 cm x 5 cm)
205: 9"W x 7"H x 2.75"D (23 cm x 18 cm x 7 cm)
210: 9"W x 7"H x 2.75"D (23 cm x 18 cm x 7 cm)
215: 9"W x 7"H x 2.75"D (23 cm x 18 cm x 7 cm)









EB DIMENSIONS

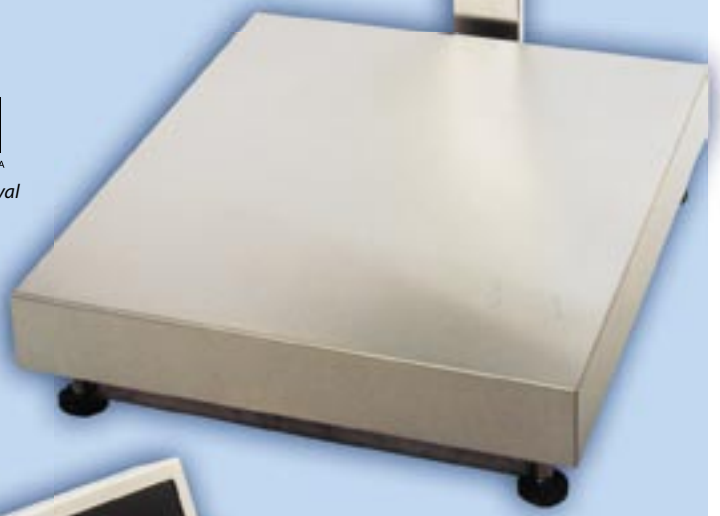
MODEL	PLATFORM	INDICATOR	"A"	"B"	"C"
EB-15-	10" x 12"	204	2.9375"	21"	16"
EB-30-	10" x 12"	205/210/215	2.9375"	21.4375"	16.5"
EB-60-	14" x 16"	204	3.1875"	27.875"	20"
EB-150-	14" x 16"	205/210/215	3.1875"	28.0625"	20.5"
EB-300-	20" x 24"	204	5.125"	27.1875"	27"
	20" x 24"	205/210/215	5.125"	27.625"	27.5"

Stainless steel bench scales... now with improved features to answer your weighing needs

Simplicity of design and rugged construction are the key features of Detecto's stainless steel bench scale series. A simple frame and bridge design with lift-off platform simplifies cleanup by providing direct access to all of the components.

Select the size and capacity scale you need and match it up with the Cardinal digital weight indicator that best suits your application. The 204 is perfect for basic weighing. For harsher environments, choose the 205 with NEMA 4X enclosure or the 210 or 215 which also features keypad tare, piece count and checkweighing. Whatever your needs may be, select from the complete line of stainless steel bench scales (stainless steel base, deck, and column).

Model EB-300-210



REQUIRES ASSEMBLY

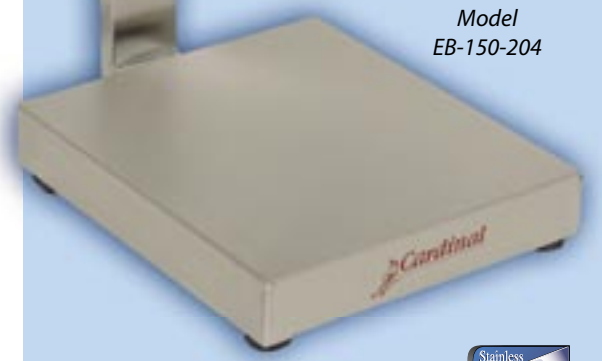
LEGAL FOR TRADE

Cert. No. 03-031A1

MEASUREMENT CANADA

Notice of Approval AM-5526

Model EB-150-204



Model 205

Model EB-15-LPAN

Stainless Steel The Value Option

EB Features:

- Stainless Steel Construction
- Large LED or LCD Display
- Push Button Tare
- Flexible Print Formats
- Pounds/Kilograms
- Gross, Tare, Net
- AC Power
- Auto Shutoff

SPLASHPROOF

For a full breakdown of 200 series weight indicator differences, please see pages 3-4 of this catalog.

*EB scales utilizing models 205, 210, and 215 digital weight indicators feature a **NEMA 4X/IP66 stainless steel washdown enclosure** for use in rugged and harsh environments.*

*The **optional checkweigher light bar** for the model 210 indicator allows you to instantly know what the status of your weight is whether you are near or far. It mounts on top of the display for a clear, bright indication of checkweighing functions.*

NAUTILUS WATERPROOF BENCH SCALES

Nautilus Stainless Steel Bench Scales

As tough and resilient as their namesake, Cardinal's Nautilus Series waterproof bench scales are engineered to provide years of accurate, reliable weighing. The robust parallel flexure weighbridge conforms to Scale Manufacturers Association standards for shock and overload protection.

The Nautilus is constructed entirely of heavy-duty, stainless steel to withstand constant use and frequent wash down with high-pressure hoses. Featuring the model 205 or 210 digital weight indicator with NEMA 4X/IP66 stainless steel enclosure (for additional features, please refer to the adjoining page), the Nautilus works even in the harshest, wettest environments.

Available in four capacities and featuring selectable key lockout, label printing, and adjustable filtering, the Nautilus is the most versatile wash down scale available.

Print tab settings make it easy to setup a ticket or label with information you need to print. Cardinal can create two additional custom print formats to meet your specifications, including bar codes!

FEATURES:

- Multiple weight modes, including lb/oz
- All stainless steel construction
- NEMA 4X/IP66 indicator enclosure
- Available in four capacities
- Multiple print formats
- Dual RS232 ports

NATIONAL CONFERENCE ON WEIGHTS AND MEASURES — LEGAL FOR TRADE

Cert. No. 02-006

MEASUREMENT CANADA

Notice of Approval AM-5470

Nautilus Bench Scales

Featuring the Model 205 Weight Indicator

MODEL	CAPACITY	UPC CODE
NB1418-60-205	60 lb x 0.02 lb	809161125108
NB1418-125-205	125 lb x 0.05 lb	809161125207
NB1418-30KG-205	30 kg x 0.01 kg	809161125306
NB1418-60KG-205	60 kg x 0.02 kg	809161125405

Featuring the Model 210 Weight Indicator

MODEL	CAPACITY	UPC CODE
NB1418-60-210	60 lb x 0.02 lb	809161125504
NB1418-125-210	125 lb x 0.05 lb	809161125603
NB1418-30KG-210	30 kg x 0.01 kg	809161125702
NB1418-60KG-210	60 kg x 0.02 kg	809161125801

For weight indicator features, please refer to pages 8 and 9 or the inside front cover comparison chart.

Overall Dimensions: 15"W x 23.25"D x 27.75"H / 38 cm W x 59 cm D x 70 cm H
Platform Dimensions: 14"W x 18"D / 35 cm W x 45 cm D
Indicator Dimensions:
205: 9"W x 7"H x 2.75"D / 23 cm x 18 cm x 7 cm
210: 9"W x 7"H x 2.75"D / 23 cm x 18 cm x 7 cm
Platform Construction: all-stainless steel with stainless steel load cell
Power: 90 to 260 VAC, 50/60 Hz - 12 VDC
Shipping Weight: 57 lb / 26 kg

Model NB1418-60-205

Model NB1418-125-210

Digital Portion Control Scales

AC or battery power

NSF Certified

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
PS-4	4 lb x 0.1 oz / 2,000 g x 1 g	4 lb / 1.8 kg	809161138405

Display: 0.8"/20 mm high LCD
Overall Size: 1.5"H x 5.9"W x 6.7"D/4 cm H x 15 cm W x 17 cm D
Platform Size: 5.9"W x 4.75"D/15 cm W x 12 cm D

AC or battery power

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
PS-5A	70 oz x 0.1 oz / 1,998 g x 2 g	4 lb / 1.8 kg	809161101102

Display: 0.5"/13 mm high LCD
Overall Size: 2.75"H x 7"W x 7"D/7 cm H x 18 cm W x 18 cm D
Platform Size: 6.75"W x 5.25"D/17 cm W x 13 cm D

AC or battery power

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
PS-6A	70 oz x 0.25 oz	4 lb / 1.8 kg	809161101300

Display: 0.5"/13 mm high LCD
Overall Size: 2.75"H x 7"W x 7"D/7 cm H x 18 cm W x 18 cm D
Platform Size: 6.75"W x 5.25"D/17 cm W x 13 cm D

AC or battery power

NSF Certified

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
PS-7	7 lb x 0.1 oz / 112 oz x 0.1 oz / 112 oz x 1/8 oz / 3000 g x 1 g / 7 lb x 0.005 lb	4 lb / 1.8 kg	809161133608

Features the ability to disable different units of measure.

Display: 5-digit, 0.8" x 0.3" characters with fractions LCD
Overall Size: 2.44"H x 8.03"W x 7.87"D / 6 cm H x 20 cm W x 20 cm D
Platform Size: 8.02"W x 4.96"D / 20 cm W x 13 cm D

AC power or built-in rechargeable battery

NSF Certified

Stainless Steel – The Value Option

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
PS-11	11 lb x 0.1 oz / 176 oz x 0.1 oz / 176 oz x 1/4 oz / 5000 g x 2 g / 11 lb x 0.005 lb	6 lb / 2.7 kg	809161133707

Features the ability to disable different units of measure.

Display: 5-digit, 0.8" x 0.3" characters with fractions LCD
Overall Size: 2.3"H x 7.25"W x 9.5"D / 6 cm H x 18 cm W x 24 cm D
Platform Size: 6.89"W x 6.5"D / 18 cm W x 17 cm D

MEASUREMENT CANADA

Notice of Approval AM-5064

LEGAL FOR TRADE

Cert. No. 95-087A1

AC power

Optional Commodity Scoop - Model 285R31

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
AP-6	99.95 oz x 0.05 oz	5 lb / 2.3 kg	809161101904
AP-8	7.998 lb x 0.002 lb	5 lb / 2.3 kg	809161102000
AP-10	9.995 lb x 0.005 lb	5 lb / 2.3 kg	809161102109
AP-20	19.99 lb x 0.01 lb	5 lb / 2.3 kg	809161102208
AP-4K	3999 g x 1 g	5 lb / 2.3 kg	809161101805

Display: 0.5"/13 mm high LED
Overall Size: 2.75"H x 7.5"W x 7"D/7 cm H x 19 cm W x 18 cm D
Platform Size: 6.75"W x 5.25"D/17 cm W x 13 cm D

BAKER DOUGH & DIGITAL INGREDIENT SCALES

Baked Enamel Baker Dough Scales

MODEL	CAPACITY	UPC CODE
1001TB	16 lb with scoop Beam grads: 16 oz x 1/4 oz	809161103007
1001TBNS	16 lb without scoop Beam grads: 16 oz x 1/4 oz	809161103106
1001TBKG	8 kg with scoop Beam grads: 500 g x 5 g	809161103205
1001T2B	16 lb with scoop Beam grads: 32 oz x 1/2 oz	809161126402
1001T2BNS	16 lb without scoop Beam grads: 32 oz x 1/2 oz	809161126502
1002TB	8 lb with scoop Beam grads: 16 oz x 1/4 oz	809161103304
1002TBNS	8 lb without scoop Beam grads: 16 oz x 1/4 oz	809161103403
1002TBKG	5 kg with scoop Beam grads: 500 g x 5 g	809161103502

Same specs as stainless steel models, but in a baked enamel finish.

Model 1001TB

Model 1001TBNS

Stainless Steel Baker Dough Scales

MODEL	CAPACITY	UPC CODE
1051TBS	16 lb with scoop	809161103601
1051TBSKG	8 kg with scoop	809161127003
1052TBS	8 lb with scoop	809161103700
1052TBSKG	5 kg with scoop	809161127102

Includes weights and white plastic scoop
Finish: Stainless steel base, platter, and poise weight
Platform: 9"/23 cm diameter
Shipping Weights: 38 lb (17 kg) for 16 lb / 8 kg models
30 lb (14 kg) for 8 lb / 5 kg models

Model 1051TBS

Model PZ3015

Digital Ingredient Scales

Detecto's stainless steel PZ3000 series feature totally touchless zeroing of each ingredient for more sanitary conditions and faster prepping. The scales allow convenient units switching between most used measurements and each measurement can easily be turned off. These scales feature an AC adapter or battery operation with up to 50 hours of continuous use. Non-skid feet allow them to remain steady on slippery surfaces and optional foot tare and mountable push-button switches are available. The PZ3000 series provide an audible confirmation of zero.

MODEL	CAPACITY / DESCRIPTION	PLATTER SIZE	SHIP WEIGHT	UPC CODE
PZ3015	15 lb x 1/8 oz / 240 oz x 0.1 oz / 15 lb x 0.005 lb / 7 kg x 2 g / 7 kg x 0.005 kg	8"W x 8"D x 1.75"H / 20 cm W x 20 cm D x 4.4 cm H	10 lb / 5 kg	809161138900
PZ3015L	15 lb x 1/8 oz / 240 oz x 0.1 oz / 15 lb x 0.005 lb / 7 kg x 2 g / 7 kg x 0.005 kg	12" W x 12" D x 1.75"H / 30 cm W x 30 cm D x 4.4 cm H	18 lb / 8 kg	809161139006
PZ3030	30 lb x 1/4 oz / 480 oz x 0.1 oz / 30 lb x 0.01 lb / 15 kg x 5 g / 30 lb x 0.1 oz / 15 kg x 0.005 kg	12" W x 12" D x 1.75"H / 30 cm W x 30 cm D x 4.4 cm H	18 lb / 8 kg	809161139105
PZ3060	60 lb x 1/4 oz / 60 lb x 0.02 lb / 30 kg x 0.02 kg	14"W x 12"D x 3"H / 36 cm W x 30 cm D x 8 cm H	24 lb / 11 kg	809161139204

Model DS-30

Cert. No. 04-085

DS Series

The built-in rechargeable battery supply not only monitors the battery life, but also recharges the battery while the scale is in operation ensuring no unexpected "down time". Pressing the PrePack key after the unit price has been entered, retains that price for repetitive price-computing making the operator's job even more simple.

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
DS-6	6 lb x 0.002 lb / 3 kg x 0.001 kg	13 lb / 6 kg	809161132601
DS-12	12 lb x 0.005 lb / 6 kg x 0.002 kg	Same	809161132700
DS-30	30 lb x 0.01 lb / 15 kg x 0.005 kg	Same	809161132809
DS-60	60 lb x 0.02 lb / 30 kg x 0.01 kg	Same	809161132908

Display: 0.75"/19 mm high backlit LCD front and rear
Platform Size: 11.38"W x 8.25"D / 29 cm x 21 cm
Power Source: Rechargeable battery pack or 115 VAC 50/60Hz or 230 VAC 50/60Hz

Model PC-6

Cert. No. 00-128

PC-6 Series

The PC-6 is less than nine inches square, so it doesn't take up valuable counter space in stores and fits easily in kiosks or vendor carts.

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
PC-6	6 lb x 0.002 lb	3 lb / 1.3 kg	809161100501
PC-6KG	3 kg x 0.001 kg	Same	809161126600

Display: 0.375"/9.5 mm high multi-position LCD
Platform Size: 7.875"W x 4.5"D / 20 cm W x 11 cm D
Power Source: 12 VDC from 115 or 230 VAC power adapter (included) or 5 "AA" Alkaline, Ni-Cad, or NiMH batteries (not included). Internal recharging circuit for Ni-Cad or NiMH batteries.

Cert. No. 88-028A4

MEASUREMENT CANADA
Notice of Approval AM-4539

Model PC-30

Model P220

PC-10/20/30 Series

The PC Series features an alpha keypad to name each product for printing on the labels and is constructed of heavy steel guaranteeing top performance in the harshest environments. The bright red LED display is readily viewable by the operator and customer on both sides of the scale.

MODEL	CAPACITY	SHIPPING WEIGHT	UPC CODE
PC-10	6 lb x 0.002 lb	21 lb / 9.5 kg	809161100105
PC-10KG	3 kg x 0.001 kg	Same	809161126709
PC-20	15 lb x 0.005 lb	Same	809161100204
PC-20KG	6 kg x 0.002 kg	Same	809161126808
PC-30	30 lb x 0.01 lb	Same	809161100303
PC-30KG	15 kg x 0.005 kg	Same	809161126907
P220	Thermal Printer	2.7 lb / 1.2 kg	809161100709

Display: 0.56"/14mm high red LED front and rear
Platform Size: 13.5"W x 8.75"D / 34 cm W x 22 mm D
Power Source: 115 VAC, 50/60 Hz (Optional 230 VAC, 50/60 Hz); powering a 12 VDC, 700 mA wall-plug-in power module

HANGING DIGITAL AND DIAL SCALES

"Legal-For-Trade" Digital Scales

MODEL	CAPACITY	UPC CODE
HSDC-20	20 lb x 0.01 lb	809161127409
HSDC-40	40 lb x 0.02 lb	809161137101
HSDC-100	99.95 lb x 0.05 lb	809161112108
HSDC-200	200 lb x 0.1 lb	809161112207
HSDC-500 *(this model is not "legal-for-trade")*	500 lb x 0.2 lb	809161112306
HSDC-20KG	20 kg x 0.01 kg	809161112405
HSDC-40KG	40 kg x 0.02 kg	809161127508
HSDC-50KG	50 kg x 0.02 kg	809161112504
HSDC-100KG	99.95 kg x 0.05 kg	809161112603

Display: 1"/25mm high LCD
Dimensions: Overall height (eye to hook) 10.75" / 27 cm
Head - 8.25"W x 5"D x 4.5"H /
21 cm W x 13 cm D x 11 cm H
Power: 6 "C" size alkaline batteries (not included)

Model HSDC-200

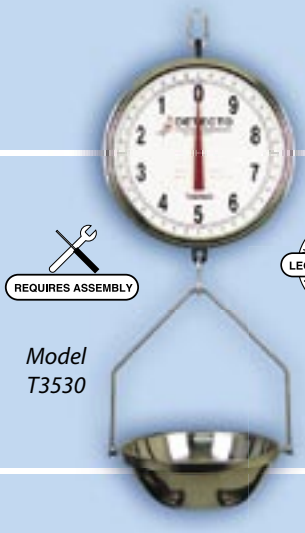
MEASUREMENT CANADA
Notice of Approval AM-5537

LEGAL FOR TRADE
Cert. No. 03-030

"Legal-For-Trade" Hanging Dial Scale
Fish and Vegetable Pan with Extra-Large Dial

MODEL	CAPACITY	REVS	UPC CODE
T3530	32 lb - 10 lb x 1 oz	3.2	809161111903

Dial: 14.5"/37 cm double dial (readable from both sides), plated sashes and stainless steel bands - white face with black lettering
Shipping Weight: 33 lb / 15 kg



REQUIRES ASSEMBLY

Model T3530

LEGAL FOR TRADE
Cert. No. 88-110

Heavy Duty Dial Scale with Hook

MODEL	CAPACITY	UPC CODE
11S200H	200 lb x 0.5 lb	809161109504
11S400H	400 lb x 1 lb	809161109603
11S200HKG	100 kg x 500 g	809161109702
11S400HKG	200 kg x 500 g	809161109801

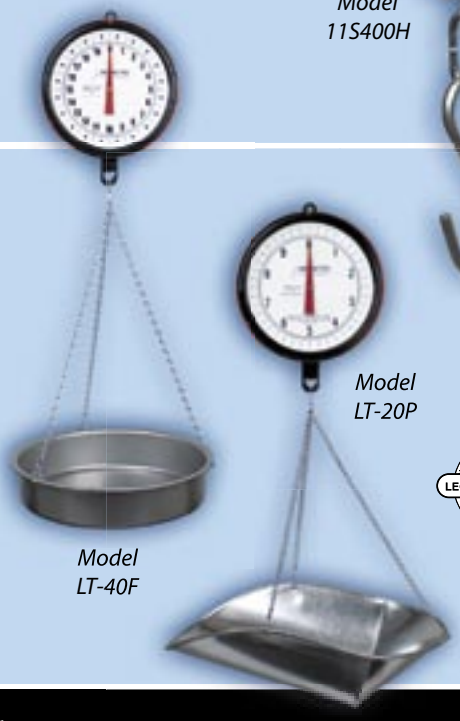
Dial: 7"/18 cm single dial, aluminum face, single revolution
Shipping Weight: 11 lb / 5 kg

Model 11S400H

"Legal-For-Trade" Hanging Dial Scales
With Scoop or Pan

MODEL	CAPACITY	DESCRIPTION	UPC CODE
LT-20P	20 lb x 1/2 oz	Galvanized scoop and chains	809161138504
LT-40P	40 lb x 1 oz	Galvanized scoop and chains	809161138603
LT-20F	20 lb x 1/2 oz	Stainless steel pan and chains	809161138702
LT-40F	40 lb x 1 oz	Stainless steel pan and chains	809161138801

Dial: 7"/18 cm diameter with shatter-resistant lens
Shipping Weight: 7 lb / 3 kg



Model LT-40F

Model LT-20P

LEGAL FOR TRADE
Cert. No. 00-018A1

HANGING DIAL SCALES

Utility Scale with "S" Hook

MODEL	CAPACITY	CHART	UPC CODE
MCS-60H	60 lb	(30 lb x 1/10 lb)	809161109900
MCS-60M	60 lb	(30 lb x 1/10 lb)	809161110005

The MCS-60M features an adjustable pointer that can be set anywhere on the dial. The net weight and gross weight are visible in one glance.
Hook: Heavy-duty plated 4"/10 cm S-hook
Dial: 8"/20 cm diameter - 2 revolutions
Shipping Weight: 4 lb / 1.8 kg

Scoop Scale

MODEL	CAPACITY	CHART	UPC CODE
MCS-20P	20 lb	(10 lb x 1 oz)	809161110104
MCS-40P	40 lb	(20 lb x 2 oz)	809161110203
MCS-10KGP	10 kg	(5 kg x 25 g)	809161110302
MCS-20KGP	20 kg	(10 kg x 50 g)	809161110401

Scoop: Galvanized 11"x 16"x 5" / 28 cm x 41 cm x 13 cm with chains
Dial: 8"/20 cm diameter - 2 revolutions
Shipping Weight: 5 lb / 2.3 kg

Fish Scale

MODEL	CAPACITY	CHART	UPC CODE
MCS-20F	20 lb	(10 lb x 1 oz)	809161110500
MCS-40F	40 lb	(20 lb x 2 oz)	809161110609
MCS-10KGF	10 kg	(5 kg x 25 g)	809161110708
MCS-20KGF	20 kg	(10 kg x 50 g)	809161110807

Pan: 14.5"/37 cm round stainless steel pan with drainage holes and stainless steel bow
Dial: 8"/20 cm diameter - 2 revolutions
Shipping Weight: 6 lb / 2.7 kg

Butcher Scale

MODEL	CAPACITY	CHART	UPC CODE
MCS-20B	20 lb	(10 lb x 1 oz)	809161110906
MCS-10KGB	10 kg	(5 kg x 25 g)	809161111002

Plate: 11"/28 cm diameter white enamel, suspended from chrome bow
Dial: 8"/20 cm diameter - 2 revolutions
Shipping Weight: 5 lb / 2.3 kg

Hook Scale

MODEL	CAPACITY	CHART	UPC CODE
MCS-20H	20 lb	(10 lb x 1 oz)	809161111101
MCS-40H	40 lb	(20 lb x 2 oz)	809161111200
MCS-10KGH	10 kg	(5 kg x 25 g)	809161111309
MCS-20KGH	20 kg	(10 kg x 50 g)	809161111408

Hook: Heavy-duty plated 4"/10 cm S-hook
Dial: 8"/20 cm diameter - 2 revolutions
Shipping Weight: 4 lb / 1.8 kg

Accessories

***"D" Double Dial**: available on all scales listed on this page. Add "D" to the model number, for example: MCS-20DF - 20 lb Scoop Scale with double dial.*

TOP LOADING DIAL SCALES

Whatever your need in a Top Loading Dial Scale, Detecto has a model to handle the job efficiently and reliably. The Top Loaders feature easy-to-read fixed or rotating dials with large pointers, shatterproof lenses, and sturdy, robust construction.

The petite PT models fit just about anywhere and can be ordered with a measuring cup or taco/french fry holder. Whether checking ingredients in prep areas, portioning in service areas, or receiving goods at the back door, Detecto Top Loaders help control costs.

Model PT-5 with fixed dial

Model PT-5R with rotating dial

Petite Top Loading Dial Scales

MODEL	CAPACITY	DIAL	FINISH	UPC CODE
PT-1	16 oz x 1/4 oz	Fixed	Enamel	809161104608
PT-2	32 oz x 1/4 oz	Fixed	Enamel	809161104707
PT-5	5 lb x 1/2 oz	Fixed	Enamel	809161104806
PT-25	25 lb x 1/8 lb	Fixed	Enamel	809161104905
PT-2R	32 oz x 1/4 oz	Rotating	Enamel	809161105001
PT-2SR	32 oz x 1/4 oz	Rotating	Stainless Steel	809161105100
PT-5R	5 lb x 1/2 oz	Rotating	Enamel	809161105209
PT-5SR	5 lb x 1/2 oz	Rotating	Stainless Steel	809161122503
PT-10SR	10 lb x 1/4 oz	Rotating	Stainless Steel	809161122602
PT-25R	25 lb x 1/8 lb	Rotating	Enamel	809161105308
PT-25SR	25 lb x 1/8 lb	Rotating	Stainless Steel	809161122702
PT-500RK	500 g x 2 g	Rotating	Enamel	809161105407
PT-500SRK	500 g x 2 g	Rotating	Stainless Steel	809161105506
PT-1000RK	1,000 g x 5 g	Rotating	Enamel	809161105605
PT-1000SRK	1,000 g x 5 g	Rotating	Stainless Steel	809161105704

Dial Size: 6″ / 15 cm diameter
Platform Size: 7.875″W x 5.875″D / 20 cm W x 15 cm D stainless steel
Overall Size: 5.25″W x 7.25″D x 7.5″H / 13 cm W x 18 cm D x 19 cm H
Shipping Weight: 5 lb / 2 kg

Improve your efficiency with a reliable, cost-effective Top Loading Dial Scale from Detecto!

Model PT-25SR in stainless steel

Taco/French Fry Dial Scale

Snap-on stainless steel tray for tacos and french fries

MODEL	CAPACITY	DIAL	FINISH	UPC CODE
PT-1TF	16 oz x 1/4 oz	Fixed	Enamel	809161105803

Dial Size: 6″ / 15 cm diameter
Platform Size: 7.875″W x 5.875″D / 20 cm W x 15 cm D stainless steel
Overall Size: 5.25″W x 7.25″D x 7.5″H / 13 cm W x 18 cm D x 19 cm H
Shipping Weight: 6 lb / 2.3 kg

Model PT-1TF with snap-on taco / french fry tray

Ice Cream Overrun Dial Scale

Pint measuring cup included - Dial chart designed to give overrun percentages

MODEL	CAPACITY	DIAL	FINISH	UPC CODE
PT-2C	32 oz x 1/4 oz	Fixed	Enamel	809161105902

Dial Size: 6″ / 15 cm diameter
Platform Size: 7.875″W x 5.875″D / 20 cm W x 15 cm D stainless steel
Overall Size: 5.25″W x 7.25″D x 7.5″H / 13 cm W x 18 cm D x 19 cm H
Shipping Weight: 6 lb / 2.3 kg

Model PT-2C with measuring cup and dial chart for over-run percentages

TOP LOADING DIAL SCALES

Dual Reading Metric Dial Scales

MODEL	CAPACITY	DIAL	FINISH	UPC CODE
T1KP	1 kg x 5 g / 2.2 lb x 1/8 oz	Fixed	Enamel	809161121308
T2KP	2 kg x 10 g / 4.3 lb x 1/2 oz	Fixed	Enamel	809161108705
T5KP	5 kg x 25 g / 11 lb x 1 oz	Fixed	Enamel	809161108804
T10KP	10 kg x 50 g / 22 lb x 1 oz	Fixed	Enamel	809161108903
T25KP	25 kg x 100 g / 55 lb x 2 oz	Fixed	Enamel	809161109009
T1KPD*	1 kg x 5 g / 2.2 lb x 1/8 oz	Fixed	Enamel	809161121407
T2KPD*	2 kg x 10 g / 4.3 lb x 1/2 oz	Fixed	Enamel	809161109108

** denotes models equipped with air dashpot*
Dial Size: 8" / 20 cm diameter **Shipping Weight:** 8 lb / 4 kg
Platform Size: 9"W x 9"D / 23 cm W x 23 cm D stainless steel

Model T25KP

MODEL	CAPACITY	DIAL	FINISH	UPC CODE
T50KP	50 kg x 200 g / 110 lb x 1/4 lb	Fixed	Enamel	809161121506

Dial Size: 10.5" / 27 cm diameter **Shipping Weight:** 26 lb / 12 kg
Platform Size: 13"W x 13"D / 33 cm W x 33 cm D stainless steel

Top Loading Dial Scales With Bowl

MODEL	CAPACITY	DIAL	FINISH	UPC CODE
T10KPB	10 kg x 50 g / 22 lb x 1 oz	Fixed	Enamel	809161133301
T25KPB	25 kg x 100 g / 55 lb x 2 oz	Fixed	Enamel	809161121902
T25B	25 lb x 1 oz	Fixed	Enamel	809161133400
T50B	50 lb x 2 oz	Fixed	Enamel	809161108606
T25SB	25 lb x 1 oz	Fixed	Stainless	809161133509

Dial Size: 8" / 20 cm diameter **Shipping Weight:** 11 lb / 5 kg
Platform: Special stainless steel platform with folded edges allows easy removal
Bowl Size: 4"H x 11.5" diameter / 10 cm H x 29 cm diameter stainless steel

Model T50B

Large Dial Scales

MODEL	CAPACITY	DIAL	FINISH	UPC CODE
T2	32 oz x 1/8 oz	Fixed	Enamel	809161107104
T2R	32 oz x 1/8 oz	Rotating	Enamel	809161107302
T2RD*	32 oz x 1/8 oz	Rotating	Enamel	809161107401
T-2-S	32 oz x 1/8 oz	Fixed	Stainless Steel	809161107500
T-2-SD*	32 oz x 1/8 oz	Fixed	Stainless Steel	809161107609
T5	5 lb x 1/2 oz	Fixed	Enamel	809161107708
T-5-S	5 lb x 1/2 oz	Fixed	Stainless Steel	809161122206
T10	10 lb x 1 oz	Fixed	Enamel	809161107906
T-10-S	10 lb x 1 oz	Fixed	Stainless Steel	809161122305
T25	25 lb x 1 oz	Fixed	Enamel	809161108101
T-25-S	25 lb x 1 oz	Fixed	Stainless Steel	809161122404
T50	50 lb x 2 oz	Fixed	Enamel	809161108309

** denotes models equipped with air dashpot*
Dial Size: 8" / 20 cm diameter **Shipping Weight:** 8 lb / 4 kg
Platform Size: 9"W x 9"D / 23 cm W x 23 cm D stainless steel

Also available in 100 lb x 4 oz and 200 lb x 8 oz models with 10.5" (27 cm) diameter dial.

Model T2R

MAILING/SHIPPING SCALES

MS-8 Electronic "Mail-Master" Scale

Weigh, rate and count your mail accurately with Detecto's MS-8 "Mail-Master"! The "Mail-Master" is a power-packed, auto rate calculating, 8 lb capacity scale designed for long-lasting performance and utilizing heavy metal construction and a large, brilliant red LED display. Value added features include letter counting and a selectable default service setting for maximum operational speed. A wide range of postal rates are supported such as presort, international and express mail as well as many special services.

MODEL	CAPACITY	PLATFORM SIZE
MS-8	8 lb x 0.1 oz	10" W x 8.25" D / 25 cm W x 21 cm D

Display: 5-digit, 0.6" (15mm) high red LED with weight and rate status indicators
Power: 115 VAC +/- 10% 60 Hz
Shipping Weight: 11 lb / 5 kg

LEGAL FOR TRADE

Cert. No. 94-066

Model MS-8

FEATURES
• Rate mark-up
• Weigh/rate display
• Automatic zip-to-zone conversion

MS-15/30/100/1600 Postal/UPS Scales

Now you can have a full range of capabilities in a scale that meets your budget, making parcel control affordable. The MS Series comes in a variety of capacities listed below to suit your needs. Detecto's MS Series Shipping Scales fully support all USPS and UPS services, provide zip-to-zone conversion, manual weight entry and piece count for bulk mail. With a color-coded numeric keypad that's easy to use and to clean, these units also feature an easily replaceable rate cartridge. Calculations and zone charts are a thing of the past, just push a button and let Detecto do the work for you!

MODEL	CAPACITY	PLATFORM SIZE
MS-15	15 lb x 0.05 oz	15"W x 9"D / 38 cm W x 23 cm D
MS-30	30 lb x 0.1 oz	Same
MS-100	100 lb x 0.2 oz	Same
MS-1600	100 lb x 0.1 oz *Not "Legal-For-Trade"*	Same

Display: 0.5" (13mm) high LED display
Power: 110/115 VAC, 50/60 Hz
Shipping Weight: 21 lb / 10 kg

LEGAL FOR TRADE

Cert. No. 91-163 Models MS-15, MS-30, and MS-100

Model MS-15

FEATURES
• Fully supported USPS and UPS services
• Zip-to-zone conversion
• Manual weight entry

MSB-25 Bulk Mail Scale

Detecto's MSB-25 bulk mail scale can display weight of a single mailpiece, the number of pieces per pound, or the number of pieces on the scale after entry of a sample, making it a versatile scale for the mailroom or shipping department. Status indicators are included for motion, zero, gross weight, net weight, tare, weight per piece, piece per weight, count, sample, pounds, and pounds-ounces. You can use the rear-mounted serial data interface for connection to an optional printer or computer for output of displayed information. A pullout card is attached underneath the front of the MSB-25 with operating instructions that are readily visible.

MODEL	CAPACITY	PLATFORM SIZE
MSB-25	25 lb x 0.005 lb or 0.1 oz	17.5" W x 15" D / 44 cm W x 38 cm D

Display: Easy-to-read dot matrix
Power: 110/120 VAC, 60 Hz
Shipping Weight: 28 lb / 13 kg

Model MSB-25

FEATURES
• Stainless steel weighing platform
• Display count, piece weight, or pieces per pounds

AS Series Scales for Computer-Based Systems

Ship your parcels on Detecto's full line of PC-Compatible Scales. Whether you need to weigh letter size mail or ship large boxes that need extra wide platforms, Detecto makes a variety of capacities and platform sizes listed below to suit your shipping needs. Whether in a mailroom, shipping department, or warehouse, just connect these scales to your computer (12 ft. / 3.7m cable included) and take advantage of the most dependable scales on the market. The setup diskette is included.

Some of Detecto's AS Series are "legal for trade" and their 5-digit 0.5" (13mm) high built-in vacuum fluorescent displays are easy to read. Controls include ON/OFF and Zero switches. The lift-off stainless steel platform wipes clean easily. Optional ball top transfers are available (pictured above).

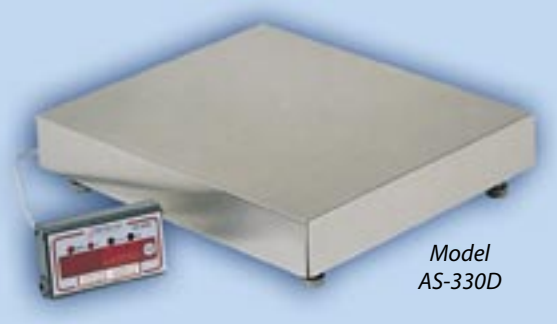
- *Switch selectable baud rate*
- *Selectable weight on demand or continuous weight output*
- *ASCII format with 8 data bits -no parity - 1 stop bit*

Model BT-1818

Model AS-410D

Models AS-350D and AS-400D

MODEL	CAPACITY	DIVISION VALUE / DESCRIPTION	PLATFORM SIZE / BALL TOP HEIGHT	SHIPPING WEIGHT	NTEP CERT.
AS-350D	150 lb	150 lb x 0.02 lb or 0-5 lb x 0.1 oz / 5-100 lb x 0.5 oz / 100-150 lb x 1 oz	12" x 14" / 31 cm x 36 cm	33 lb / 15 kg	95-171
AS-400D	100 lb	0.5 oz	18" x 18" / 46 cm x 46 cm	45 lb / 20 kg	90-008A
AS-410D	150 lb	0-100 lb x 0.5 oz / 100-150 lb x 1 oz	18" x 18" / 46 cm x 46 cm	45 lb / 20 kg	
AS-420D	200 lb	0.1 lb	24" x 24" / 61 cm x 61 cm	62 lb / 28 kg	
BT-1214		Ball top transfer for 12" x 14" platform	1.32" / 33 mm from platform	9 lb / 4 kg	
BT-1818		Ball top transfer for 18" x 18" platform	1.32" / 33 mm from platform	12 lb / 5 kg	



Model AS-330D

REQUIRES ASSEMBLY

Cert. No. 99-198A1

Model AS-334D

"Legal-For-Trade" PC-Compatible Scales

The displays for these "legal for trade" economical intelligent scale bases may be mounted on the stainless steel scale base, wall, or counter. The modular serial port allows the scale to be interfaced with a personal computer. Comes with 6-digit, 0.5" /13 mm) 7-segment LED with 5' /1.5 m cable and mounting bracket, and includes 12'/3.7 m computer interface cable.

MODEL	CAPACITY / DESCRIPTION	SHIPPING WEIGHT
AS-330D	150 lb x 0.05 lb or 0-100 lb x 0.5 oz or 100-150 lb x 1 oz or kilograms mode	22 lb / 10 kg
BT-1214	Ball top transfer for 12" x 14" platform	9 lb / 4 kg

Display Dimensions: 4.5"W x 0.875"D x 2.5"H / 11 cm W x 2 cm D x 6 cm H
Platform Dimensions: 12"L x 14"W x 3.5"H / 31 cm L x 36 cm W x 9 cm H
Power: 120 Volt AC adapter with 12 volt DC

MODEL	CAPACITY	SHIPPING WEIGHT
AS-333D	17.5 lb x 0.005 lb / 7 kg x 0.002 kg	10 lb / 5 kg
AS-334D	35 lb x 0.01 lb / 17.5 kg x 0.005 kg	10 lb / 5 kg

Display Dimensions: 4.5"W x 0.875"D x 2.5"H / 11 cm W x 2 cm D x 6 cm H
Platform Dimensions: 6"L x 10"W x 2.5"H / 15 cm L x 25 cm W x 6 cm H
Power: 120 Volt AC adapter with 12 volt DC

High-Capacity Truck And Tank Assembly

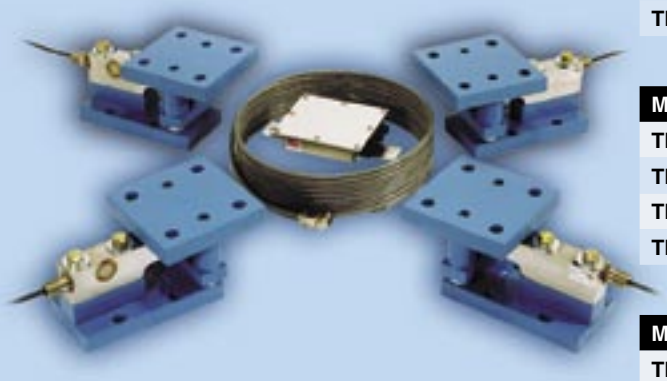
The high-capacity load cell suspension assembly furnishes high performance in a variety of medium to heavy capacity truck, tank or hopper scales. This unique load cell mount also eliminates the need for check rods or expansion assemblies, and is supplied with quick connections for easy installation and removal.

High-Capacity Truck And Tank Assembly

MODEL	NO. OF ASSEMBLIES	PARTS INCLUDED	SYSTEM CAPACITY
THBC50K-4	4	1 J-Box	60 ton
THBC50K-6	6	1 J-Box, 1 Section Seal Box	80 ton
THBC50K-8	8	1 J-Box, 1 Trim Box, 1 Section Seal Box	120 ton

Electronic Tank Scale Systems SB Load Cells

Cardinal's floor mounted load cell kits are ideal for any tank or hopper with legs for floor mounting. These load cell kits are ideal for new installations or for conversion. Each kit comes complete with load cells, tank mounting hardware, load cell cable and a junction box. The stainless steel load cells are environmentally sealed and are waterproof. It is recommended for safety that structures have safety chains installed on them. They come with a full two year guarantee against defects of material and workmanship.



Kits consist of either 3 or 4 self-checking stand assemblies, 3 or 4 SB series stainless or mild steel load cells, 3 or 4 mild steel stands and 1 stainless steel NEMA 4 junction box.

3 SB Cells - Mild Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
THBC2.5-3	2,500 lb / 1,135 kg	7,500 lb / 3,405 kg	120 lb
THBC5-3	5,000 lb / 2,270 kg	15,000 lb / 6,810 kg	120 lb
THBC10-3	10,000 lb / 4,535 kg	30,000 lb / 13,605 kg	180 lb
THBC20-3	20,000 lb / 9,070 kg	60,000 lb / 27,210 kg	190 lb

3 SB Cells - Stainless Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
THBCS2.5-3	2,500 lb / 1,135 kg	7,500 lb / 3,405 kg	120 lb
THBCS5-3	5,000 lb / 2,270 kg	15,000 lb / 6,810 kg	120 lb
THBCS10-3	10,000 lb / 4,535 kg	30,000 lb / 13,605 kg	180 lb
THBCS20-3	20,000 lb / 9,070 kg	60,000 lb / 27,210 kg	190 lb

4 SB Cells - Mild Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
THBC2.5-4	2,500 lb / 1,135 kg	10,000 lb / 4,540 kg	160 lb
THBC5-4	5,000 lb / 2,270 kg	20,000 lb / 9,080 kg	160 lb
THBC10-4	10,000 lb / 4,535 kg	40,000 lb / 18,140 kg	240 lb
THBC20-4	20,000 lb / 9,070 kg	80,000 lb / 36,280 kg	250 lb

4 SB Cells - Stainless Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
THBCS2.5-4	2,500 lb / 1,135 kg	10,000 lb / 4,540 kg	160 lb
THBCS5-4	5,000 lb / 2,270 kg	20,000 lb / 9,080 kg	160 lb
THBCS10-4	10,000 lb / 4,535 kg	40,000 lb / 18,140 kg	240 lb
THBCS20-4	20,000 lb / 9,070 kg	80,000 lb / 36,280 kg	250 lb

Tension Application Assemblies ZX Load Cells

Cardinal's tension load cells kits are ideal for suspension hopper applications whether it's new or an existing one. Each kit comes complete with either 3 or 4 load cells, necessary linkage, load cell cable and a junction box for a swift, easy installation. Stainless steel load cells are sealed for water protection and are supplied with rod ends that are equipped with Teflon isolators for lightning protection. Guaranteed for two full years.

3 ZX Suspension Cells

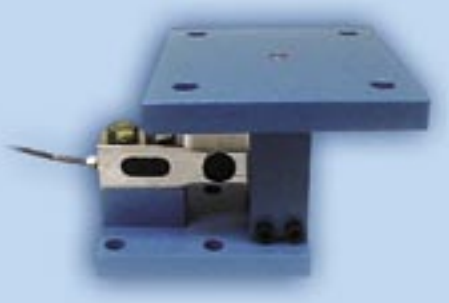
MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
THTC250-3	250 lb / 115 kg	750 lb / 345 kg	30 lb
THTC500-3	500 lb / 225 kg	1,500 lb / 675 kg	36 lb
THTC5-3	5,000 lb / 2,270 kg	15,000 lb / 6,810 kg	69 lb
THTC10-3	10,000 lb / 4,535 kg	30,000 lb / 13,605 kg	75 lb
THTC20-3	20,000 lb / 9,070 kg	60,000 lb / 27,210 kg	165 lb

4 ZX Suspension Cells

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
THTC250-4	250 lb / 115 kg	1,000 lb / 460 kg	35 lb
THTC500-4	500 lb / 225 kg	2,000 lb / 900 kg	42 lb
THTC5-4	5,000 lb / 2,270 kg	20,000 lb / 9,080 kg	87 lb
THTC10-4	10,000 lb / 4,535 kg	40,000 lb / 18,140 kg	95 lb
THTC20-4	20,000 lb / 9,070 kg	80,000 lb / 36,280 kg	215 lb

Electronic Tank Scale Systems TB Load Cells

This version of Cardinal's floor mounted load cell kits come with stainless steel, environmentally-sealed TB series load cells, which are waterproof, making them ideal for tank or hopper scales. Choose from 3 or 4 cell kits with either mild steel stands, or for harsher environments, select one of the stainless steel stand varieties. Special self-centering load buttons protect against offset side loads. Each kit comes complete with load cells, tank mounting hardware, load cell cable and a NEMA 4 junction box.



Kits consist of either 3 or 4 self-checking stand assemblies, 3 or 4 TB series stainless steel load cells, 3 or 4 mild steel stands and 1 stainless steel NEMA 4 junction box.

3 TB Cells - Mild Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
TBCS-1KM-3	1,000 lb / 454 kg	3,000 lb / 1,361 kg	65 lb
TBCS-25KM-3	2,500 lb / 1,134 kg	7,500 lb / 3,402 kg	65 lb
TBCS-4KM-3	4,000 lb / 1,814 kg	12,000 lb / 5,443 kg	65 lb

3 TB Cells - Stainless Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
TBCSS-1KM-3	1,000 lb / 454 kg	3,000 lb / 1,361 kg	67 lb
TBCSS-25KM-3	2,500 lb / 1,134 kg	7,500 lb / 3,402 kg	67 lb
TBCSS-4KM-3	4,000 lb / 1,814 kg	12,000 lb / 5,443 kg	67 lb

4 TB Cells - Mild Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
TBCS-1KM-4	1,000 lb / 454 kg	4,000 lb / 1,814 kg	84 lb
TBCS-25KM-4	2,500 lb / 1,134 kg	10,000 lb / 4,524 kg	84 lb
TBCS-4KM-4	4,000 lb / 1,814 kg	16,000 lb / 7,258 kg	84 lb

4 TB Cells - Stainless Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
TBCSS-1KM-4	1,000 lb / 454 kg	4,000 lb / 1,814 kg	86 lb
TBCSS-25KM-4	2,500 lb / 1,134 kg	10,000 lb / 4,524 kg	86 lb
TBCSS-4KM-4	4,000 lb / 1,814 kg	16,000 lb / 7,258 kg	86 lb

Light Cell Electronic Tank Scale Systems - CB Load Cells

A complete kit for floor mounted tank or hopper scales, the CB series stainless steel load cells come in sets of three or four cells with mild steel stands for legged tanks. They are easy to install with a low-profile design and come with a full two year guarantee.

3 CB Cells - Mild Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
CBCS-50KG-3	110 lb / 50 kg	330 lb / 150 kg	21 lb
CBCS-100KG-3	200 lb / 100 kg	600 lb / 300 kg	21 lb
CBCS-200KG-3	400 lb / 200 kg	1,200 lb / 600 kg	21 lb

4 CB Cells - Mild Steel

MODEL	CELL CAPACITY	SYSTEM CAPACITY	SHIP WT.
CBCS-50KG-4	110 lb / 50 kg	440 lb / 200 kg	25 lb
CBCS-100KG-4	200 lb / 100 kg	800 lb / 400 kg	25 lb
CBCS-200KG-4	400 lb / 200 kg	1,600 lb / 800 kg	25 lb

Self-Checking Shear Beam Stands - SB Load Cells

The stand includes the lower load cell mounting plate, upper mounting plate, hardened steel load button, and bolts and lock washers for securing the load cell to the stand. Guaranteed for two full years.

Mild Steel Construction

MODEL	LB CAPACITY	KG CAPACITY	SHIP WT.
SBCS-NC5	2,500 and 5,000	1,135 and 2,270	29 lb
SBCS-NC20	10,000 and 20,000	4,535 and 9,070	46 lb

Stainless Steel Construction

MODEL	LB CAPACITY	KG CAPACITY	SHIP WT.
SBCSS-NC5	2,500 and 5,000	1,135 and 2,270	29 lb
SBCSS-NC20	10,000 and 20,000	4,535 and 9,070	46 lb

Ball Pivot Stands

Designed specifically for use in liquid tank weighing applications, Cardinal ball pivot stands are an economical alternative to multiple load cell weighing systems. These 20,000 lb capacity stands are available in either stainless steel or painted mild steel.

Ball Pivot Stands

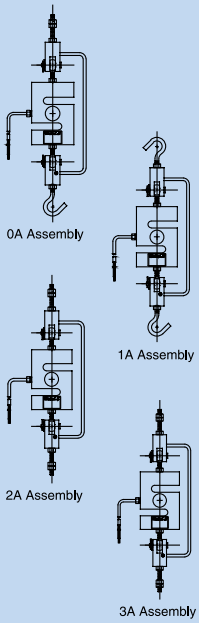
MODEL	FINISH	CAPACITY	SHIP WT.
BPS-20	Painted Mild Steel	20,000 lb	25 lb
BPSS-20	Stainless Steel	20,000 lb	25 lb

Designed specifically for use in liquid tank applications, the stands are 6.5" high.

JUNCTION BOXES AND ACCESSORIES

Tension Load Cell and Linkage with Built-in Isolator

Assemblies include tension load cell, threaded rod ends (2), clevis assemblies complete (2), and hanging assembly.



Mild Steel Linkage With Aluminum Load Cell

MODEL	CELL PROVIDED	SHIPPING WEIGHT
3501-B073-XA	Z-250	5 lb / 2.3 kg
3501-B074-XA	Z-500	5 lb / 2.3 kg
3501-B075-XA	Z-1000	5 lb / 2.3 kg

Mild Steel Linkage With Stainless Steel Load Cell

MODEL	CELL PROVIDED	SHIPPING WEIGHT
3501-B127-XA	ZX-250	5 lb / 2.3 kg
3501-B128-XA	ZX-500	6 lb / 2.7 kg
3501-B129-XA	ZX-1000	6 lb / 2.7 kg
3501-B131-XA	ZX-2500	9 lb / 4 kg
3501-B132-XA	ZX-3000	9 lb / 4 kg
3501-B133-XA	ZX-5000	18 lb / 8.1 kg
3501-B134-XA	ZX-10000	20 lb / 9 kg
3501-B135-XA	ZX-20000	50 lb / 22.7 kg

Transformers

Constant voltage transfomers are recommended for all applications if voltage change exceeds the requirements of instruments or printers. These constant voltage transformers feature built-in harmonic neutralizing circuits. The constant voltage transformer is sinusoidal, which holds the output to plus or minus 1/2% or less for input variations as great as plus or minus 15% of the nominal line voltage.

MODEL	DESCRIPTION	SHIPPING WEIGHT
6960-0032	1 indicator with adapter (6960-0044) 60VA	10 lb / 4.5 kg
6960-0045	1 indicator and printer	40 lb / 18 kg

Adjustable Load Cell Simulator

MODEL	DESCRIPTION	SHIPPING WEIGHT
4001-D002	Adjustable load cell simulator	2 lb / 0.9 kg

Load Cell Junction Box

Enclosure: NEMA 4 stainless steel with fully gasketed cover.
Range: ±10% adjustment range. 2, 3, and 4 cell junction box with trim.

MODEL	DESCRIPTION	SHIPPING WEIGHT
3502-C208-0A	Shear beam and tension cells only	5.2 lb / 2.4 kg
3502-C208-1A	Compression and double-ended cells only	5.2 lb / 2.4 kg
3502-C208-2A	Same as above, but with mounting strap	5.2 lb / 2.4 kg
3502-B233-0A	For single tension type load cell	5.2 lb / 2.4 kg

Junction Box

NEMA 4 mild steel junction box for tension type load cells furnished on Cardinal models SRL and PRL truck scales and single cell tank and hopper scales. The junction box comes furnished with 30' (9 m) of load cell cable, with no trim adjustments.

MODEL	DESCRIPTION	SHIPPING WEIGHT
3502-B233-0A	For tension type load cells	5 lb / 2.3 kg

LOAD CELLS

LOAD CELLS

TYPE	SST	SCA	SCD	DB	SB	TB	LFB	TSP	TSSP	CB	FX	ZX	Z	TSL
NTEP APPROVAL	05-076	89-042A3	89-071A1	97-133A1	87-059A1	99-018		97-136		96-091A2		92-192A2	88-166A1	
OIML APPROVAL		R60/1991-DK-96.05		R60/1991-DK-99.01	R60/1991-OK-97.02	R60/1991-DK-97.03	R60/1991-DK-00.02	R60/1991-DK-97.01	R60/1991-NL-00.02	R60/1991-DK-96.04				
ACCURACY CLASS	IIIL 10000	IIIL 10000 / C3	IIIL 10000	IIIL 10000 / C3	III 5000 / C3 IIIL 10000	III 5000 / C3	C3	III 5000 / C3 / C4	C3	III 4000 / C3 / C4		III 5000 IIIL 10000	III 5000/3000 IIIL 10000	
RATED OUTPUT	Hydraulic	2mV/V	Digital	2mV/V	2mV/V	2mV/V	2mV/V	2mV/V	2mV/V	2mV/V	2mV/V	3mV/V	2mV/V	0.64mV/V
PROTECTION CLASS	IP-68	IP-68	IP-68	IP-68	IP-68	IP-65	IP-65	IP-65	IP-65	IP-68	IP-23	IP-66/68	IP-65	IP-65
MATERIAL	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Aluminum	Stainless Steel	Stainless Steel	Aluminum	Stainless Steel	Aluminum	Stainless Steel
NOMINAL LOAD	23 T / 21 t 34 T / 31 t	23 T / 21 t 45 T / 41 t 54 T / 49 t	23 T / 21 t 45 T / 41 t 54 T / 49 t	23 T / 21 t	2500 lb / 1135 kg 5000 lb / 2270 kg 10000 lb / 4535 kg 20000 lb / 9070 kg	1000 lb / 455 kg 2500 lb / 1135 kg 4000 lb / 1814 kg	250 lb / 115 kg 550 lb / 250 kg 1100 lb / 550 kg 2750 lb / 1250 kg	20 lb / 10 kg 35 lb / 15 kg 45 lb / 20 kg 65 lb / 30 kg 110 lb / 50 kg 220 lb / 100 kg	441 lb / 200 kg	20 lb / 10 kg 30 lb / 15 kg 40 lb / 20 kg 110 lb / 50 kg 200 lb / 100 kg 400 lb / 200 kg	7.7 lb / 3.5 kg	250 lb / 115 kg 500 lb / 225 kg 1000 lb / 455 kg 2500 lb / 1135 kg 3000 lb / 1360 kg 3000 lb / 2270 kg 10000 lb / 4535 kg 20000 lb / 9070 kg	50 lb / 23 kg 100 lb / 45 kg 250 lb / 115 kg 500 lb / 225 kg 1000 lb / 455 kg	500 µE (micro strain)
APPLICATION														
DESCRIPTION	"The Guardian" hydraulic load cell	High performance compression load cell for high capacity weighing	Digital load cell with integral A/D converter	Double ended shear beam load cell for high capacity applications	Rugged high capacity beam cell for high capacity applications	Smaller profile for high to medium capacity floor scales and hopper scales	Smaller profile for medium capacity floor and bench scales - medical scales	Ideal for small retail scales and bench scales	High performance cell for bench scales and medical scales	Robust beam cell for medium capacity floor and bench scales. Ideal for washdown applications.	Inexpensive load cell for small bench and retail applications	High performance tension load cell	Cost-effective tension load cell	For content indication on tanks, bins or other material storage containers

APPLICATION										
TYPE OF SCALE	Vessel Inventory Management	Suspended Vessel	Truck Scale	Railroad Track Scale	Floor Scale	Large Bench Scale	Small/Medium Bench Scale	Livestock Scale	Clinical/Physician's Scale
SCALE CAPACITIES 7.7 lb - 1100 lb / 3.5 kg - 500 kg	TSL				TB	TB	TSP, TSSP, CB		TSSP, LFB, TSP
SCALE CAPACITIES 1100 lb - 16.5 T / 500 kg - 15 t	TSL	Z, ZX			SB, LFB	LFB		SB, ZX	
SCALE CAPACITIES 16.5 T - 275.5 T / 15 t - 250 t	SST, TSL		SST, SCA, SCD, DB	SCA, SCD				SCA, DB	

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